



MMIC SURFACE MOUNT

Low Noise Amplifier

TSY-83LN+

50Ω 0.4 to 8 GHz Bypass Mode Feature

THE BIG DEAL

- Low Loss Bypass Mode Feature
- Low Noise Figure, Typ. 1.5 dB
- High OIP3, Typ. +33.6 dBm
- High P1dB, Typ. +22.9 dBm
- 3x3 mm 12-Lead QFN-Style Package

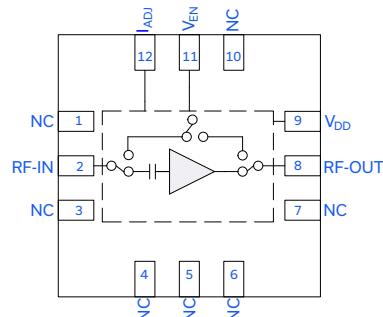


Generic photo used for illustration purposes only

APPLICATIONS

- Radar, EW, and ECM Defense Systems
- 5G Sub6, MIMO Wireless Infrastructure Systems
- Test & Measurement Equipment

FUNCTIONAL DIAGRAM



PRODUCT OVERVIEW

Mini-Circuits' TSY-83LN+ is a GaAs pHEMT based wide band, bypass mode capable, low noise MMIC amplifier with a combination of high IP3 and flat gain. Operating from 0.4 to 8 GHz, this amplifier features high dynamic range with 1.5 dB noise figure, 22 dB gain, +22.9 dBm P1dB, and +33.6 dBm OIP3. This combination of characteristics makes it ideal for sensitive, high dynamic range receiver applications where a gain stage may need to be quickly bypassed in the presence of high power RF signals. TSY-83LN+ operates on a single +5 V or +6 V supply, is well matched to 50Ω, and comes in a tiny, low profile 3x3 mm QFN-style package for ease of integration into dense circuit board layouts.

KEY FEATURES

Feature	Advantages
Bypass Mode Feature	Allows the user to quickly switch to a low loss bypass path while keeping the power supply at constant voltage to reduce gain and protect the system in the presence of high power RF signals.
Low Noise Figure, Typ. 1.5 dB at 2 GHz	Extremely low noise figure provides minimal signal-to-noise degradation in amplification mode.
High OIP3, Typ. +33.6 dBm at 2 GHz	The combination of low noise figure and high IP3 makes this MMIC amplifier ideal for use in sensitive low noise receiver front ends where high dynamic range is of paramount importance.
Wide Bandwidth with Flat Gain: ±0.6 dB over 0.4 to 6 GHz	Enables a single amplifier to be used across many applications including aerospace and defense (Radar, SATCOM, EW), broadband test instrumentation, telecommunications (5G Sub6), and more.
3x3 mm 12-Lead QFN-Style Package	Tiny footprint saves space in dense layouts while providing low inductance, repeatable transitions, and excellent thermal contact with the PCB. Industry standard packaging allows for ease of assembly in high volume manufacturing processes.

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TSY-83LN+
MCL NY
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ELECTRICAL SPECIFICATIONS¹ AT +25°C, V_{DD} = +6 V, AND Z_O = 50Ω UNLESS NOTED OTHERWISE

Parameter	Frequency (MHz)	Amplifier - ON			Amplifier - Bypass	Units
		Min.	Typ.	Max.	Typ.	
Frequency Range		400		8000	400-8000	MHz
Gain	400	21.0	21.8		-1.7	dB
	2000	21.4	22.3		-1.3	
	4000	21.2	22.3		-1.7	
	6000	22.1	23.0		-1.8	
	8000 ²	18.9	21.0		-3.5	
Input Return Loss	400		12.2		9.3	dB
	2000		16.4		14.4	
	4000		10.7		13.3	
	6000		16.3		10.3	
	8000 ²		7.4		5.8	
Output Return Loss	400		14.3		14.0	dB
	2000		20.0		15.3	
	4000		15.8		20.0	
	6000		20.0		10.9	
	8000 ²		16.9		5.5	
Isolation	400-8000		30.1			dB
Output Power at 1 dB Compression (P _{1dB})	400		+22.4		+10.5	dBm
	2000		+22.9		+11.9	
	4000		+22.5		+13.8	
	6000		+20.0		+13.9	
	8000 ²		+20.3		+14.1	
Output Third-Order Intercept Point (P _{OUT} = 0 dBm/Tone)	400		+32.2		+39.0	dBm
	2000		+33.6		+41.8	
	4000		+30.4		+41.6	
	6000		+26.2		+42.8	
	8000 ²		+25.0		+41.0	
Noise Figure	400		1.9			dB
	2000		1.5			
	4000		1.7			
	6000		1.7			
	8000 ²		2.5			
Device Operating Voltage (V _{DD})			+6		+6	V
Device Operating Current (I _{DD}) ³			104		4	mA
Enable Voltage (V _{EN}) ⁴			+6		0	V
Enable Current (I _{EN})			4.6		1.7	mA
Device Current Adjust (I _{ADJ}) ⁵			13		13	µA
Device Current Variation Vs. Temperature ⁶			-57		-57	µA/°C
Device Current Variation Vs. Voltage ⁷			0.028		0.028	mA/mV

1. Tested on Mini-Circuits Characterization Test Board TB-TSY-83LNC+. See Figure 2. Board loss de-embedded.

2. Tested on Mini-Circuits Characterization Test Board TB-TSY-832LNC+. See Figure 3. Board loss de-embedded.

3. Current at P_{IN} = -25 dBm. Increases to 150 mA at P1dB.4. V_{EN} must be equal to V_{DD} in Amplifier - ON mode.5. I_{ADJ} is not intended as a voltage input port. Gain is nominal when I_{ADJ} is left open. When I_{ADJ} is open, there is a measured voltage of +1.4 V on the pin. To change the current, add a shunt resistor (see Figures 2 and 3).

6. (Current at +105°C - Current at -45°C) / (+150°C)

7. (Current at +6 V - Current at +5 V) / (+6 V - +5 V)

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ELECTRICAL SPECIFICATIONS⁸ AT +25°C, V_{DD} = +5 V, AND Z_O = 50Ω UNLESS NOTED OTHERWISE

Parameter	Frequency (MHz)	Amplifier - ON			Amplifier - Bypass Typ.	Units
		Min.	Typ.	Max.		
Frequency Range		400	20.0	8000	400-8000	MHz
Gain	400	20.0	21.2		-1.6	dB
	2000	20.8	21.8		-1.3	
	4000	20.5	21.6		-1.6	
	6000	21.6	22.3		-1.8	
	8000 ⁹	18.5	20.6		-3.5	
Input Return Loss	400		11.5		9.3	dB
	2000		15.2		14.4	
	4000		10.0		13.5	
	6000		15.2		10.3	
	8000 ⁹		7.4		5.8	
Output Return Loss	400		14.7		13.8	dB
	2000		20.0		15.3	
	4000		14.3		20.0	
	6000		18.5		10.9	
	8000 ⁹		16.8		5.5	
Isolation	400-8000		29.7			dB
Output Power at 1 dB Compression (P _{1dB})	400		+20.5		+10.9	dBm
	2000		+21.2		+12.2	
	4000		+20.5		+14.3	
	6000		+18.4		+14.4	
	8000 ⁹		+18.8		+14.9	
Output Third-Order Intercept Point (P _{OUT} = 0 dBm/Tone)	400		+31.4		+41.1	dBm
	2000		+31.5		+43.5	
	4000		+28.4		+42.5	
	6000		+24.3		+44.6	
	8000 ⁹		+24.6		+41.7	
Noise Figure	400		1.8			dB
	2000		1.5			
	4000		1.6			
	6000		1.7			
	8000 ⁹		2.4			
Device Operating Voltage (V _{DD})			+5		+5	V
Device Operating Current (I _{DD}) ¹⁰			76		3	mA
Enable Voltage (V _{EN}) ¹¹			+5		0	V
Enable Current (I _{EN})			4.5		1.7	mA
Device Current Adjust (I _{ADJ}) ¹²			13		13	µA
Device Current Variation Vs. Temperature ¹³			-37		-37	µA/°C
Device Current Variation Vs. Voltage ¹⁴			0.028		0.028	mA/mV

8. Tested on Mini-Circuits Characterization Test Board TB-TSY-83LNC+. See Figure 2. Board loss de-embedded.

9. Tested on Mini-Circuits Characterization Test Board TB-TSY-832LNC+. See Figure 3. Board loss de-embedded.

10. Current at P_{IN} = -25 dBm. Increases to 140 mA at P_{1dB}.11. V_{EN} must be equal to V_{DD} in Amplifier - ON mode.12. I_{ADJ} is not intended as a voltage input port. Gain is nominal when I_{ADJ} is left open. When I_{ADJ} is open, there is a measured voltage of +1.4 V on the pin. To change the current, add a shunt resistor (see Figures 2 and 3).

13. (Current at +105°C - Current at -45°C) / (+150°C)

14. (Current at +6 V - Current at +5 V) / (+6 V - +5 V)

SWITCHING SPECIFICATIONS¹⁵

Parameter		+6 V Typ.	+5 V Typ.	Units
Amplifier ON to Bypass	OFF Time (50% Control to 10% RF)	16	17	ns
	FALL Time (90% to 10% RF)	17	17	ns
Amplifier Bypass to ON	ON Time (50% Control to 90% RF)	168	168	ns
	RISE Time (10% to 90% RF)	112	112	ns
Control Voltage Leakage		+97	+83	mV

15. Tested on Mini-Circuits Characterization Test Board TB-TSY-83LNC+. See Figure 2.

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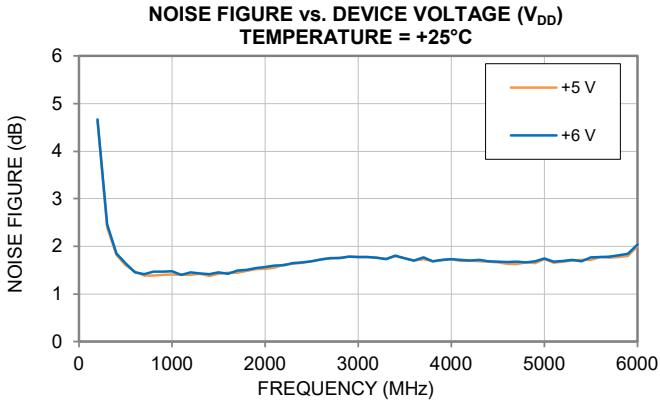
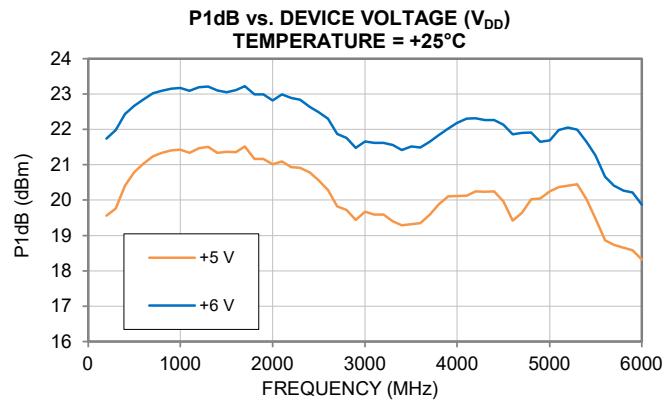
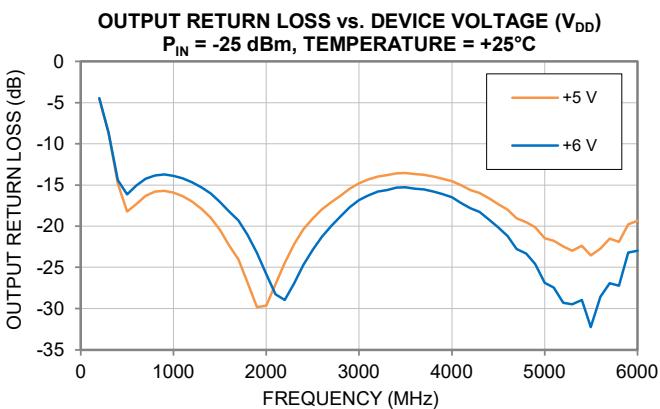
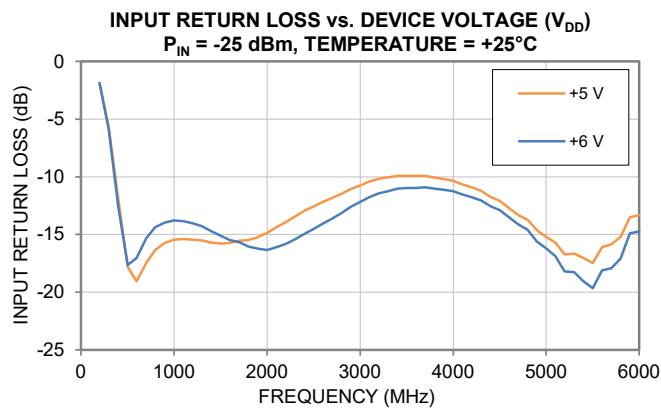
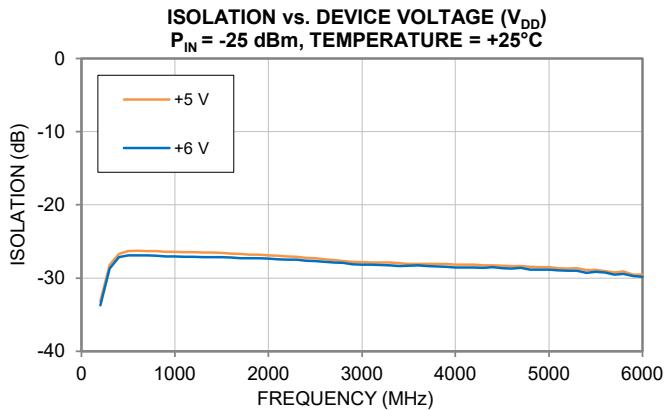
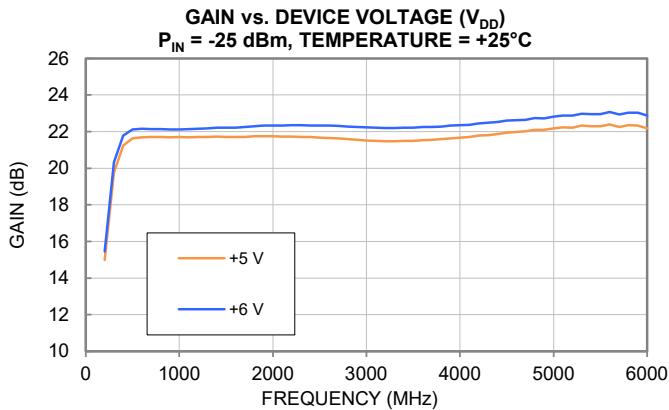
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TYPICAL PERFORMANCE GRAPHS IN AMPLIFIER-ON MODE

Note: The following data was taken on the Mini-Circuits Characterization Test Board TB-TSY-83LNC+ (Figure 2). All data taken at nominal conditions $V_{EN} = V_{DD}$ and $R_{IADJ} = \text{Open}$ unless noted otherwise.





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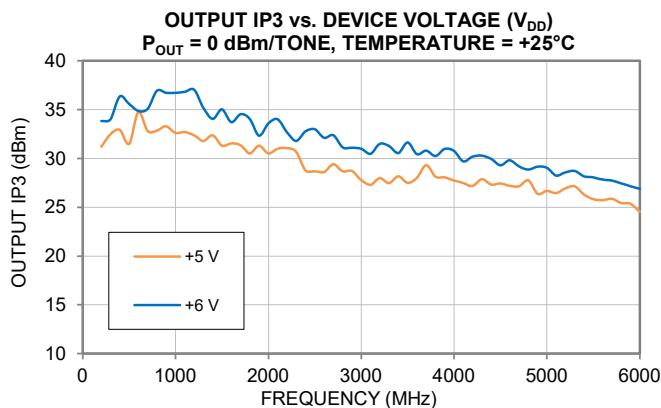
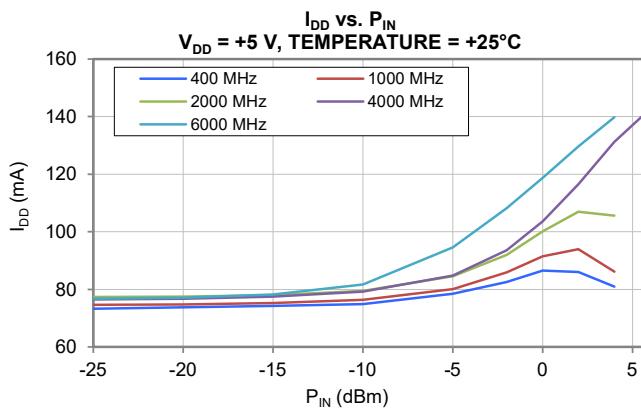
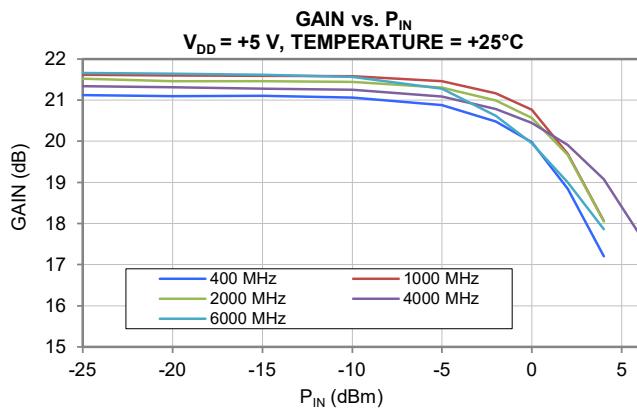
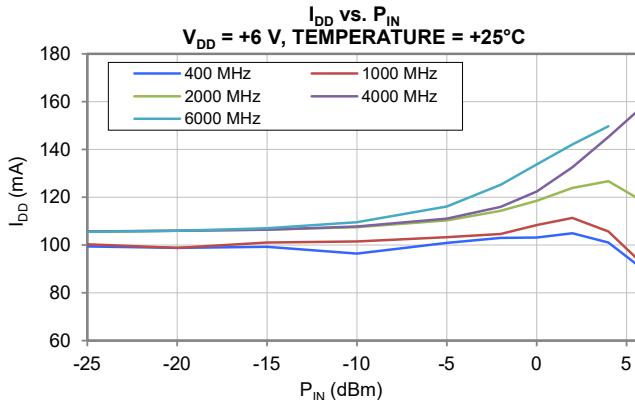
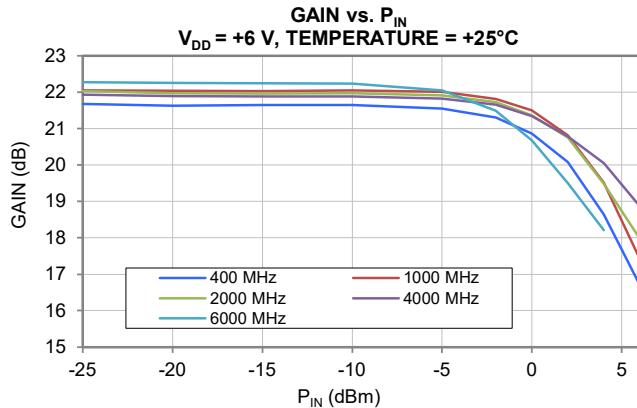
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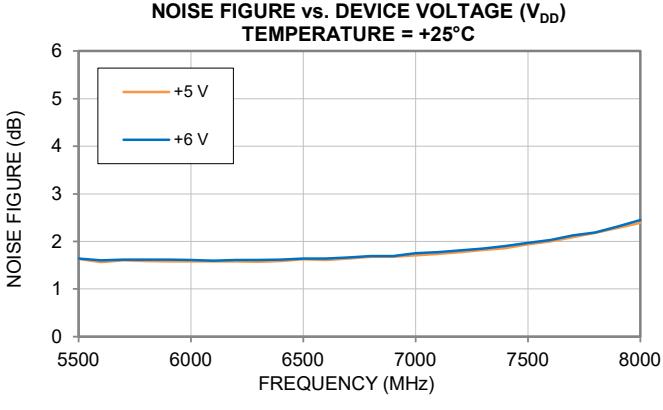
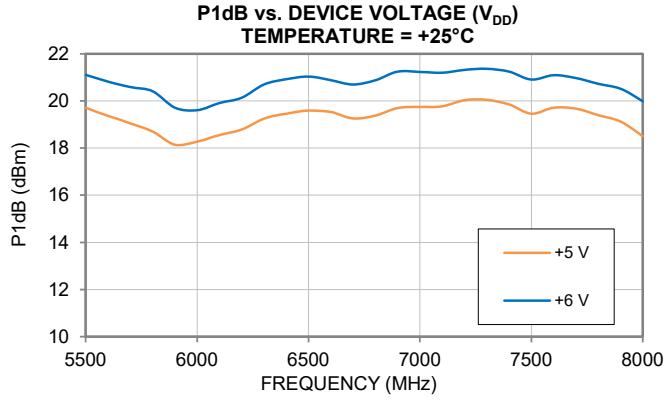
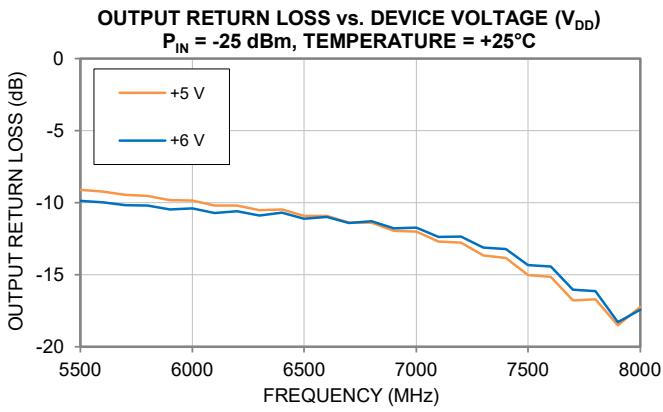
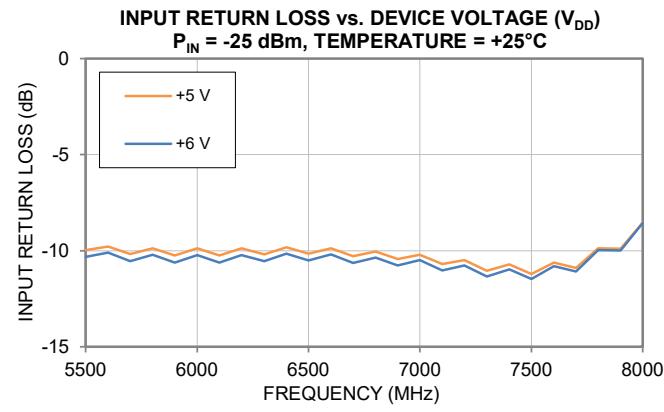
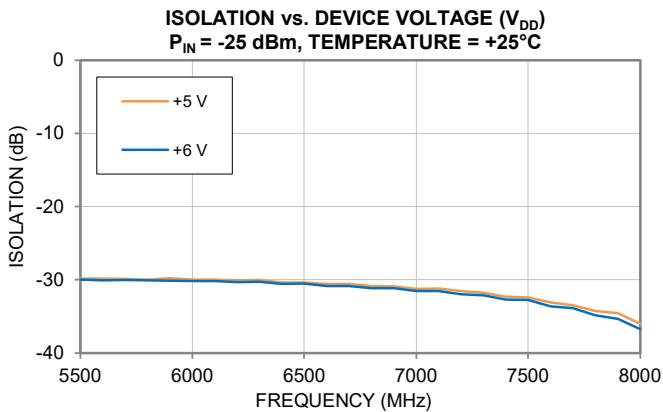
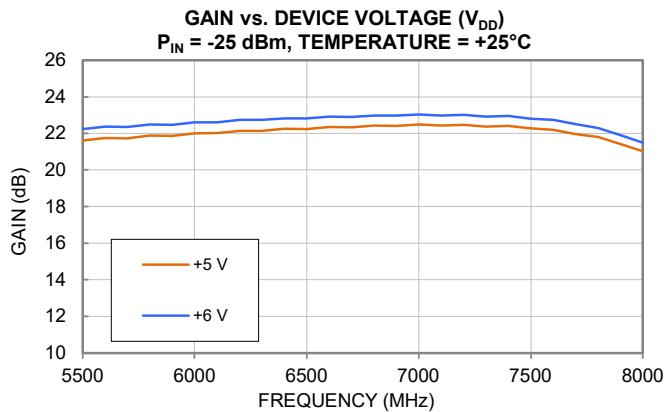
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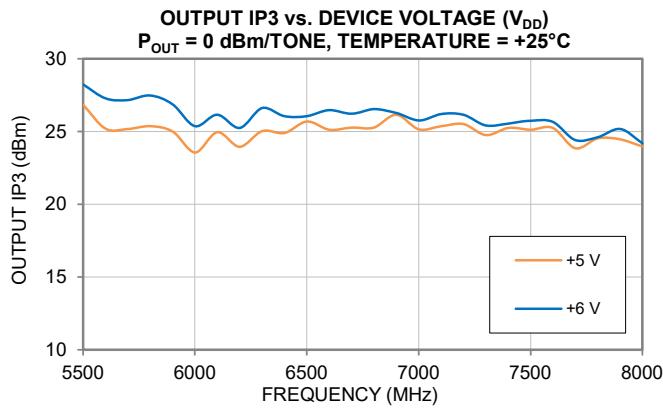
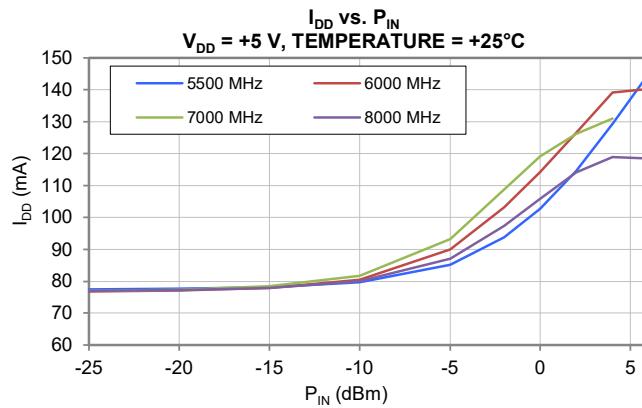
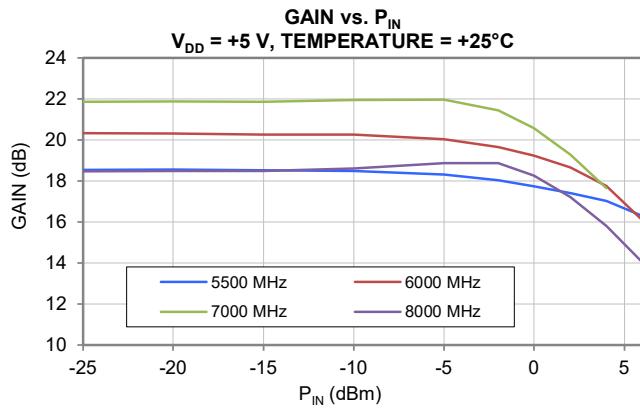
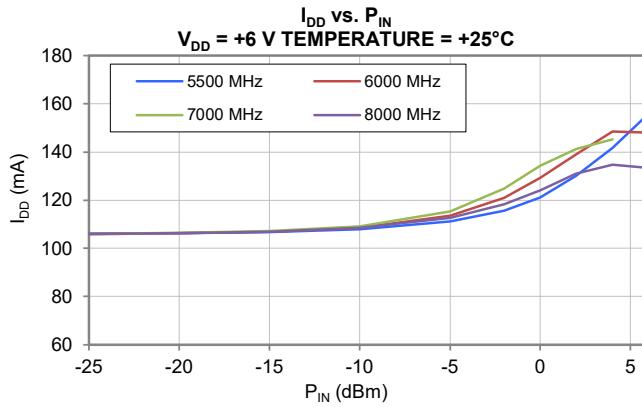
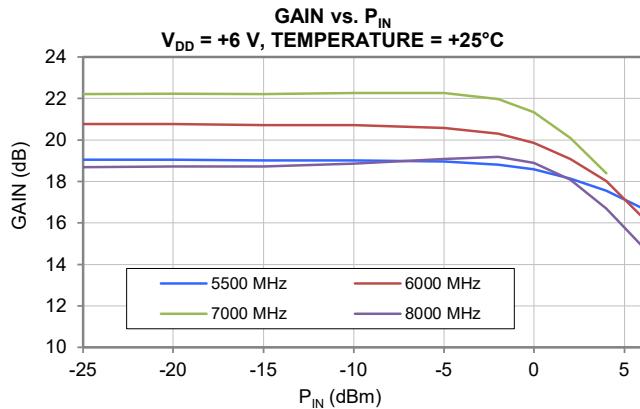
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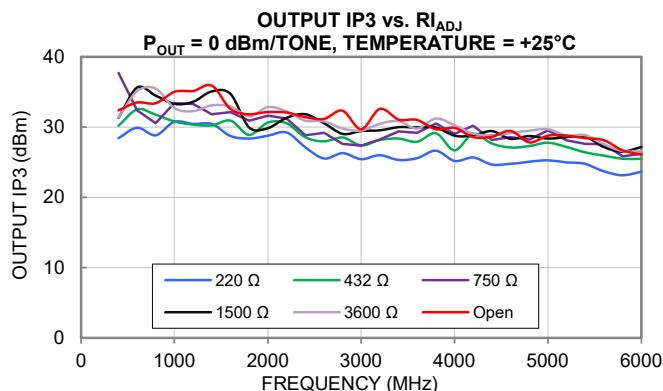
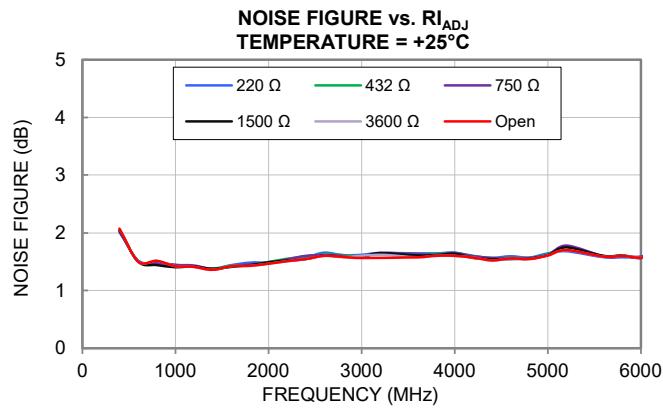
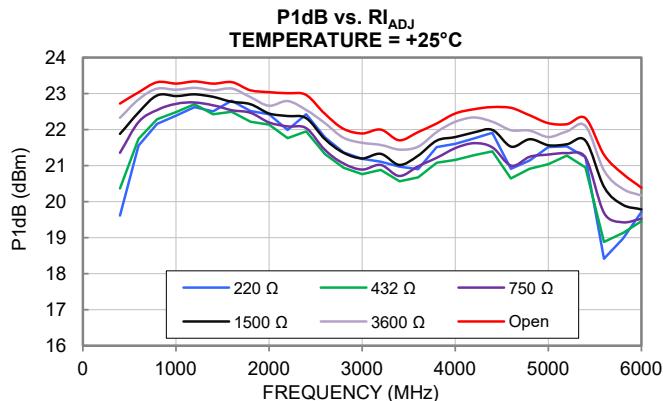
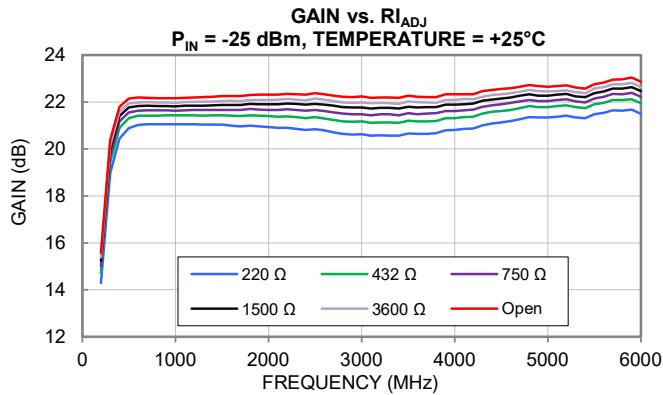
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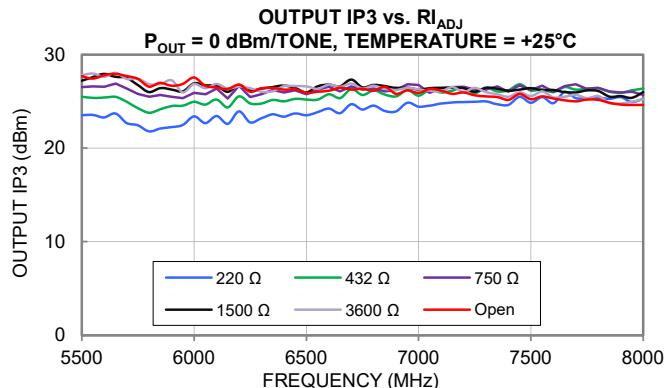
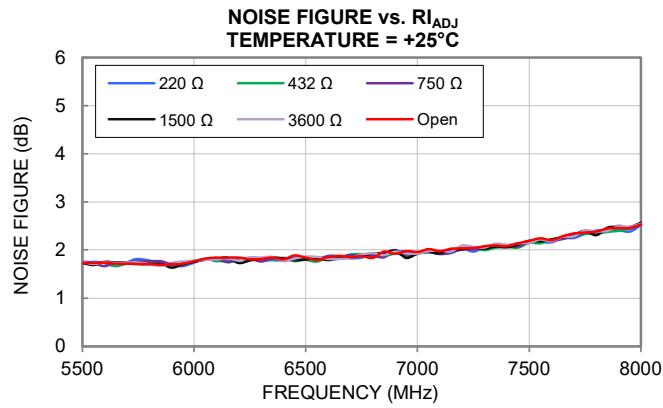
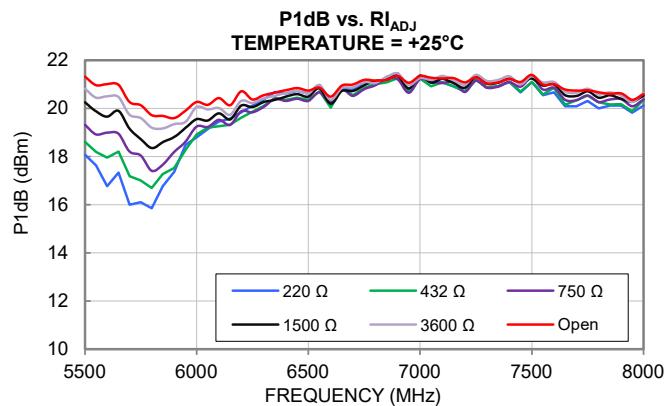
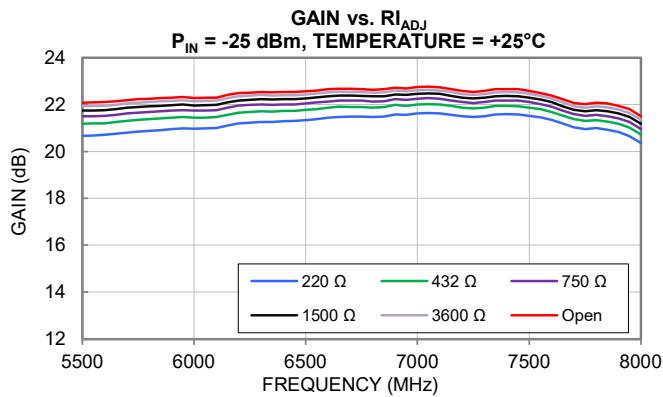
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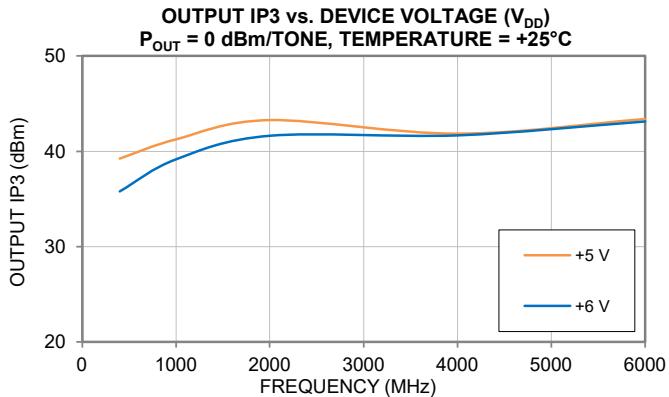
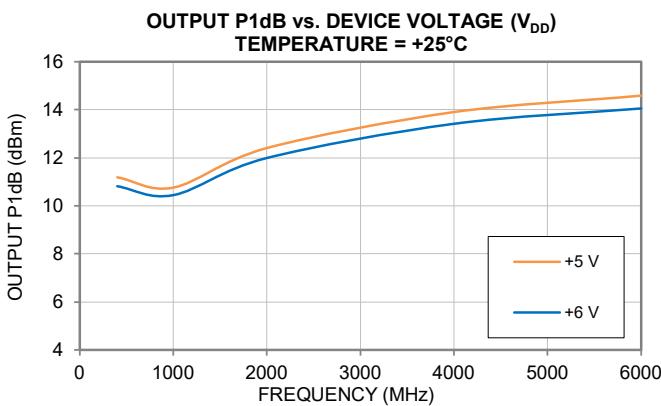
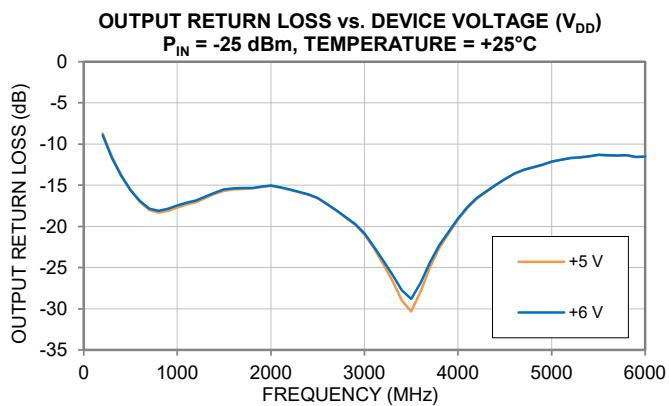
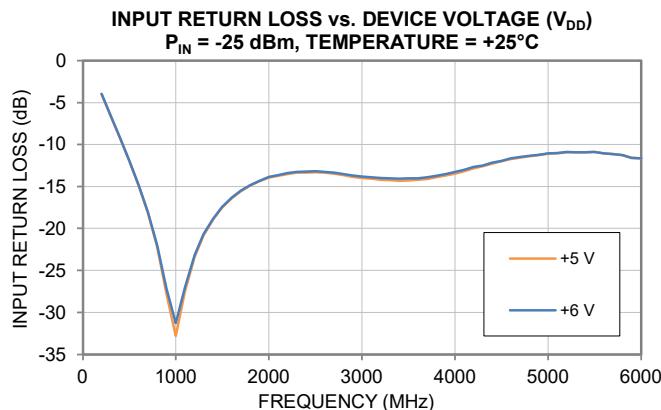
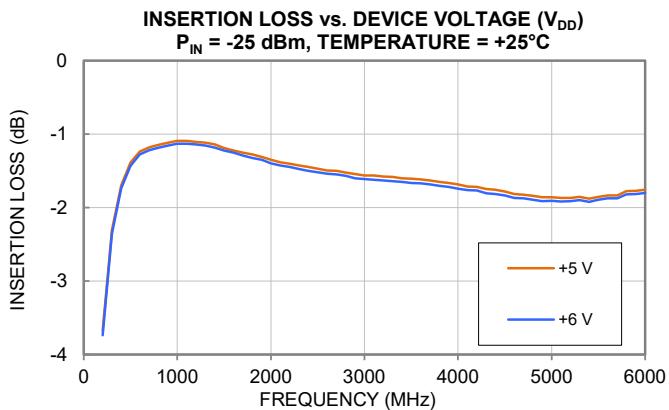
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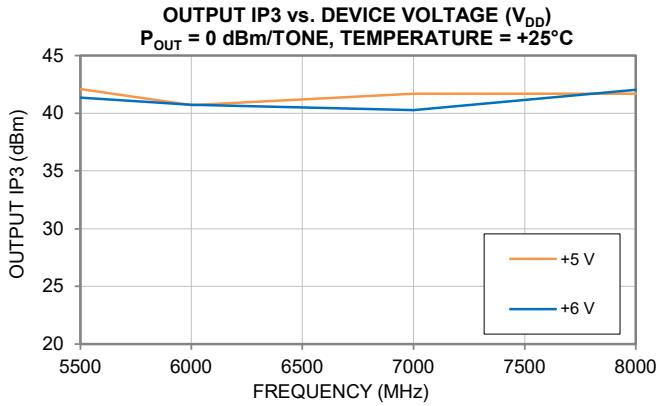
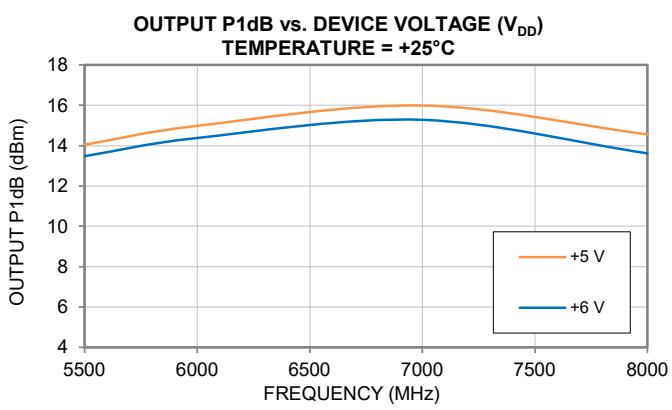
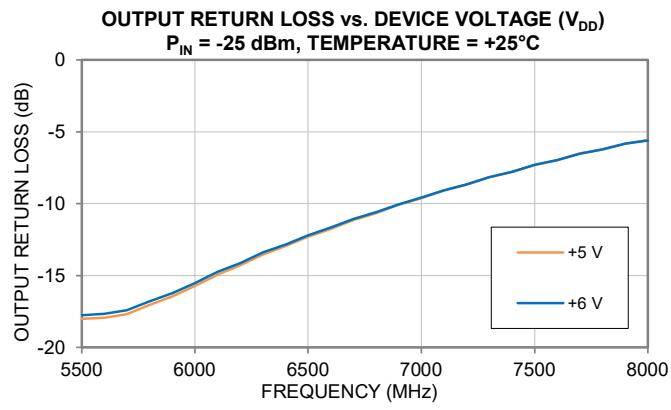
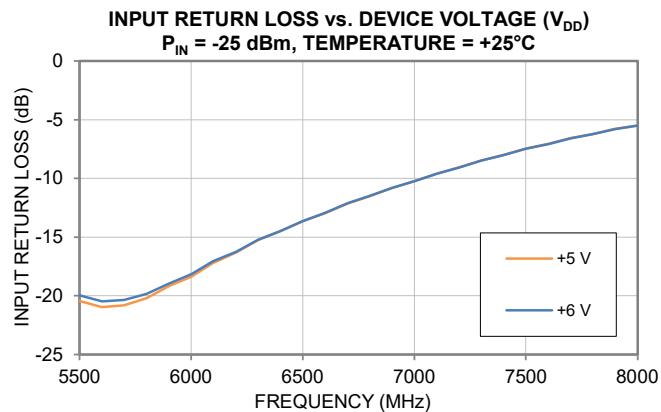
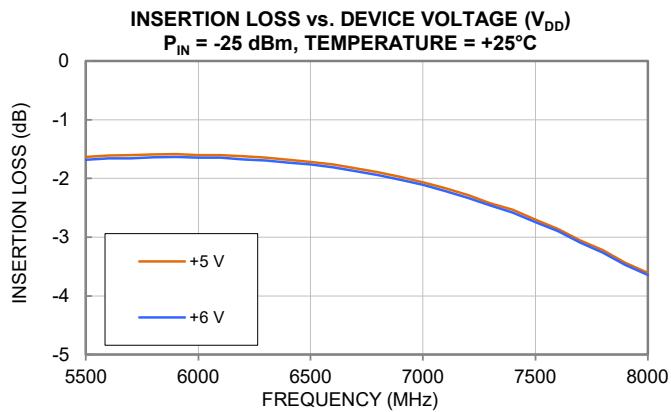
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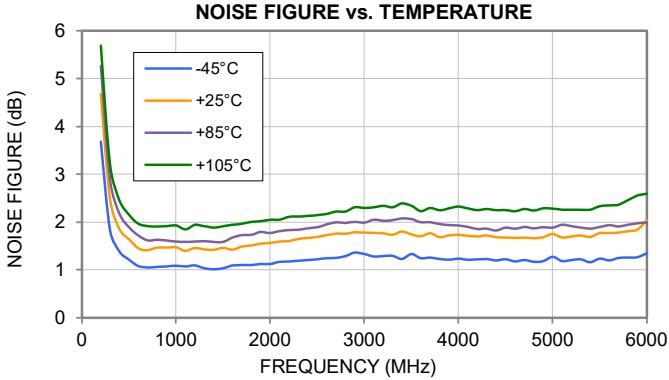
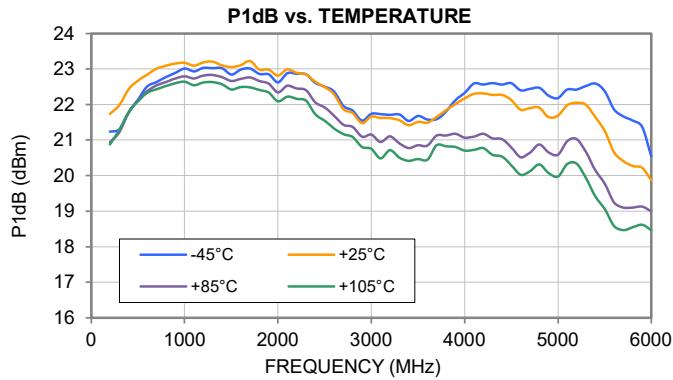
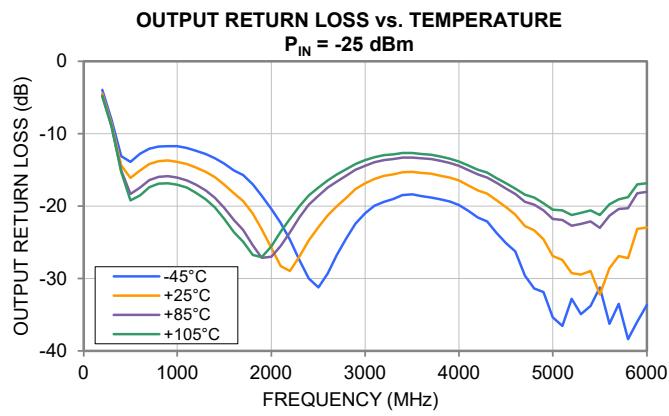
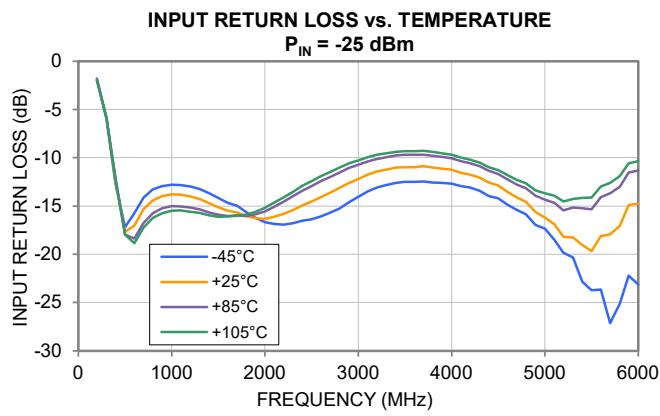
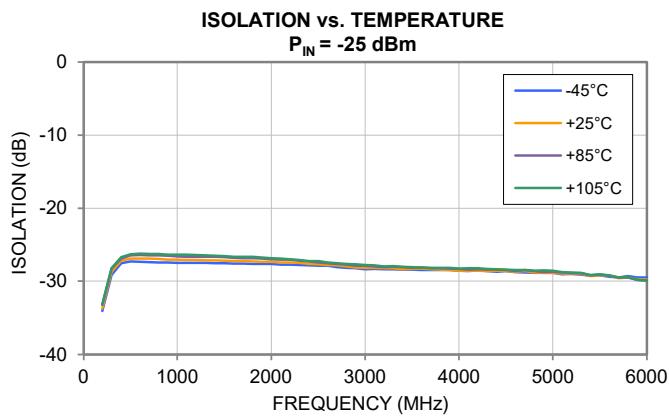
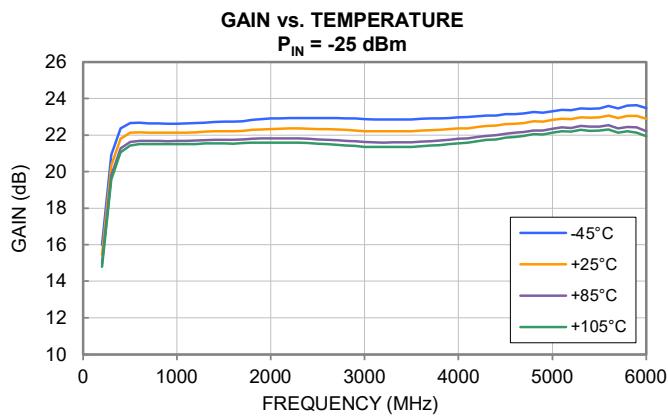
Low Noise Amplifier

TSY-83LN+

50Ω 0.4 to 8 GHz Bypass Mode Feature

TYPICAL PERFORMANCE GRAPHS IN AMPLIFIER-ON MODE

Note: The following data was taken on the Mini-Circuits Characterization Test Board TB-TSY-83LNC+ (Figure 2). All data taken at nominal conditions $V_{EN} = V_{DD} = +6$ V, and R_{IADJ} = Open unless noted otherwise.





MMIC SURFACE MOUNT

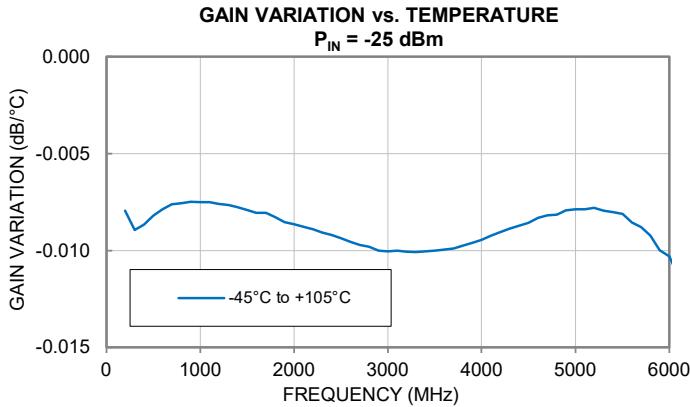
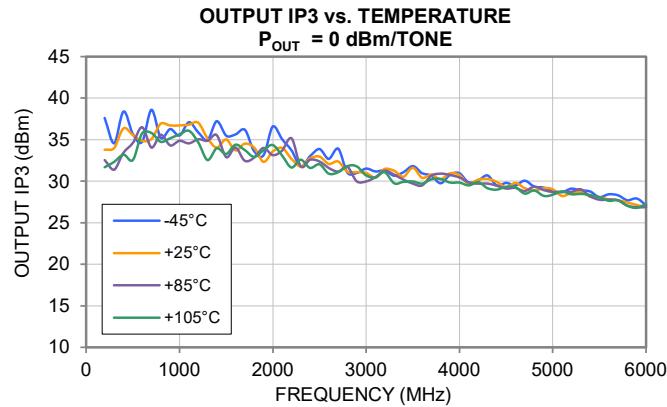
Low Noise Amplifier

TSY-83LN+

50Ω 0.4 to 8 GHz Bypass Mode Feature

TYPICAL PERFORMANCE GRAPHS IN AMPLIFIER-ON MODE

Note: The following data was taken on the Mini-Circuits Characterization Test Board TB-TSY-83LNC+ (Figure 2). All data taken at nominal conditions $V_{EN} = V_{DD} = +6$ V, and $R_{I_{ADJ}} = \text{Open}$ unless noted otherwise.

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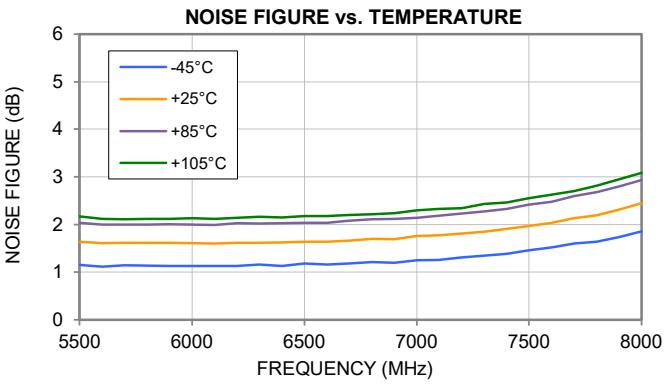
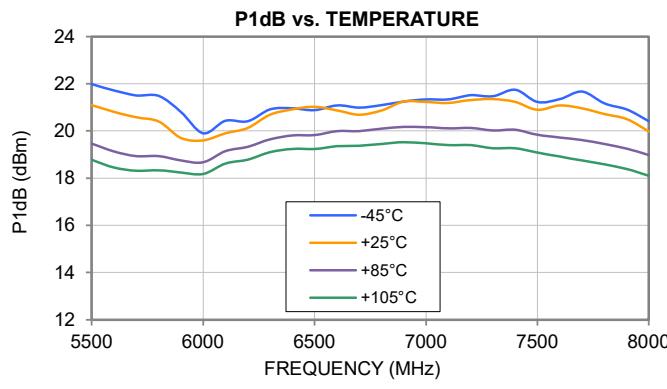
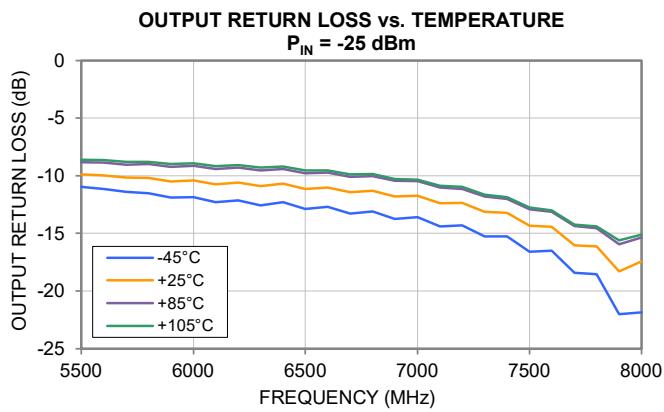
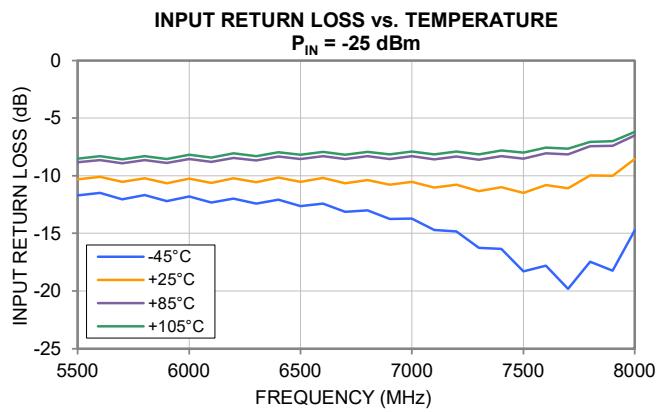
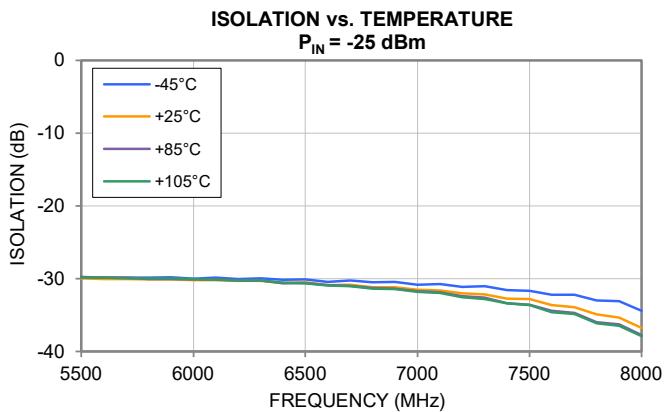
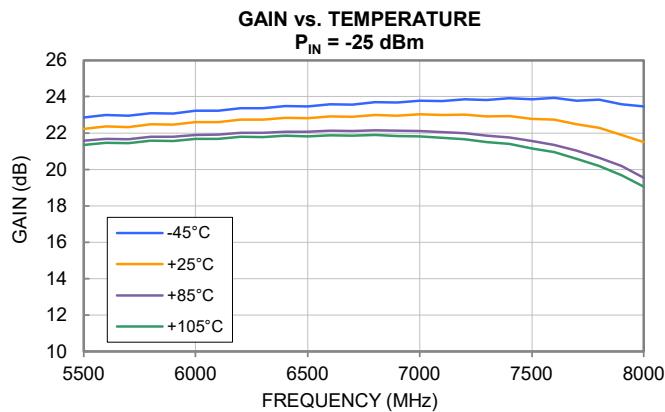
Low Noise Amplifier

TSY-83LN+

50Ω 0.4 to 8 GHz Bypass Mode Feature

TYPICAL PERFORMANCE GRAPHS IN AMPLIFIER-ON MODE

Note: The following data was taken on the Mini-Circuits Characterization Test Board TB-TSY-832LNC+ (Figure 3). All data taken at nominal conditions $V_{EN} = V_{DD} = +6$ V and R_{IADJ} = Open unless noted otherwise.





MMIC SURFACE MOUNT

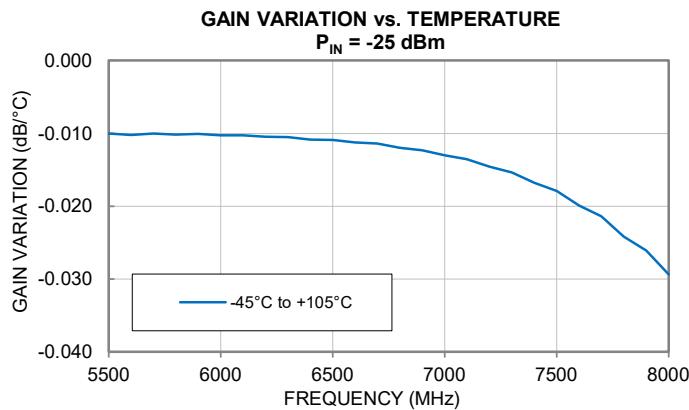
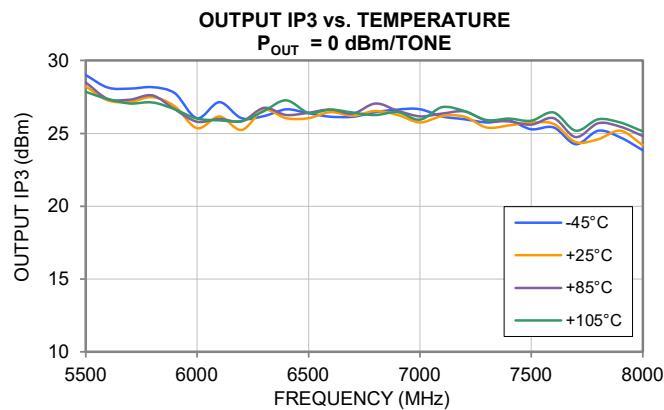
Low Noise Amplifier

TSY-83LN+

50Ω 0.4 to 8 GHz Bypass Mode Feature

TYPICAL PERFORMANCE GRAPHS IN AMPLIFIER-ON MODE

Note: The following data was taken on the Mini-Circuits Characterization Test Board TB-TSY-832LNC+ (Figure 3). All data taken at nominal conditions $V_{EN} = V_{DD} = +6$ V and $R_{I_{ADJ}} = \text{Open}$ unless noted otherwise.

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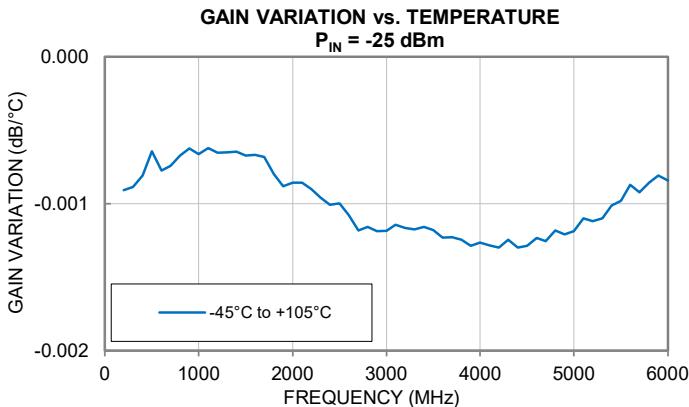
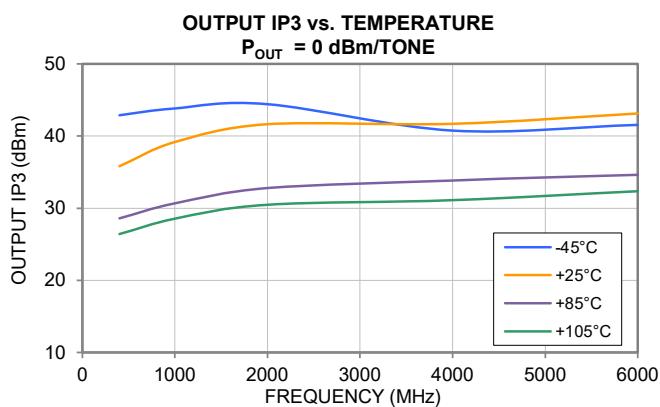
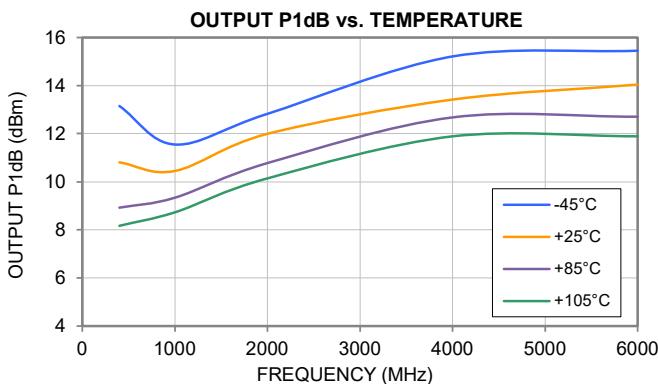
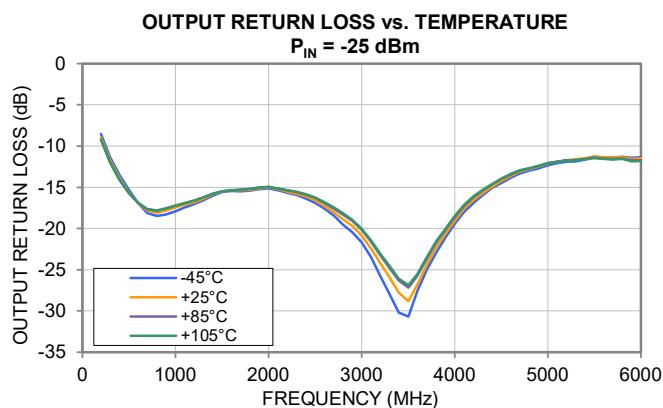
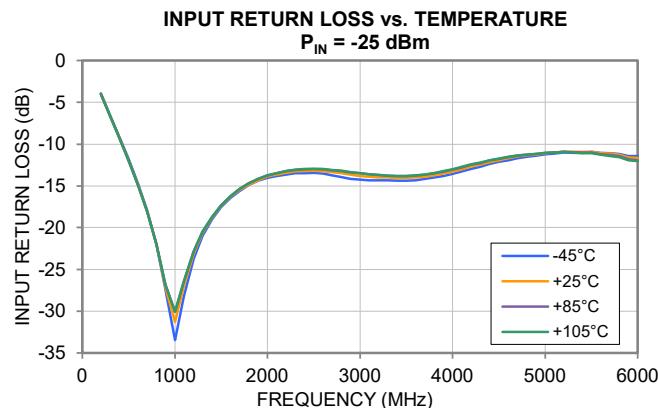
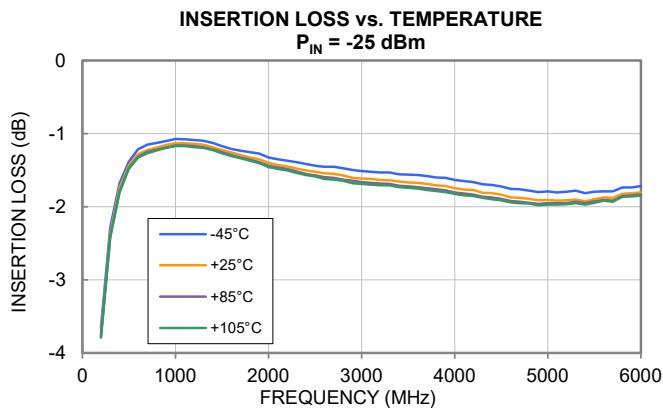
Low Noise Amplifier

TSY-83LN+

50Ω 0.4 to 8 GHz Bypass Mode Feature

TYPICAL PERFORMANCE GRAPHS IN BYPASS MODE

Note: The following data was taken on the Mini-Circuits Characterization Test Board TB-TSY-83LNC+ (Figure 2). All data taken at nominal conditions $V_{EN} = 0$ V, $V_{DD} = +6$ V, and $R_{LADJ} = \text{Open}$ unless noted otherwise.





MMIC SURFACE MOUNT

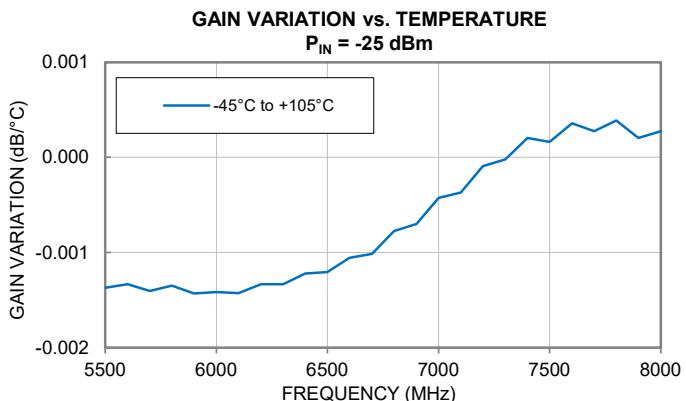
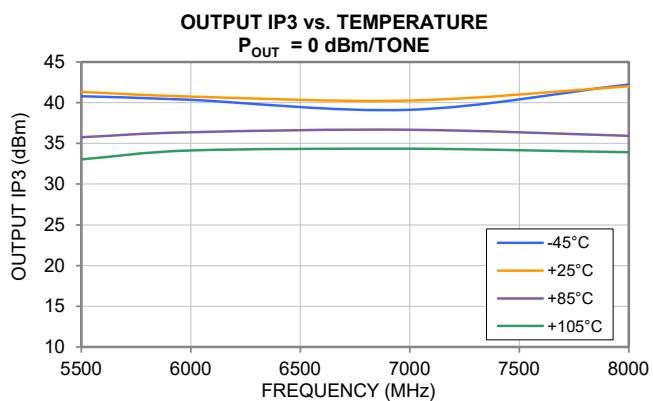
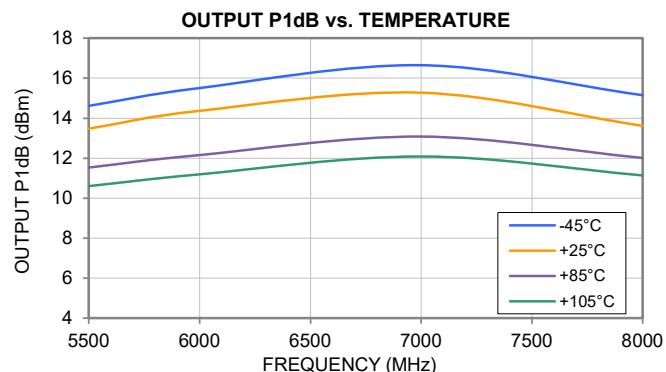
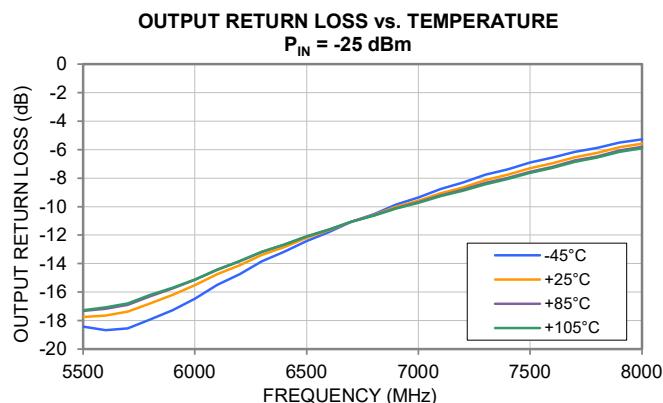
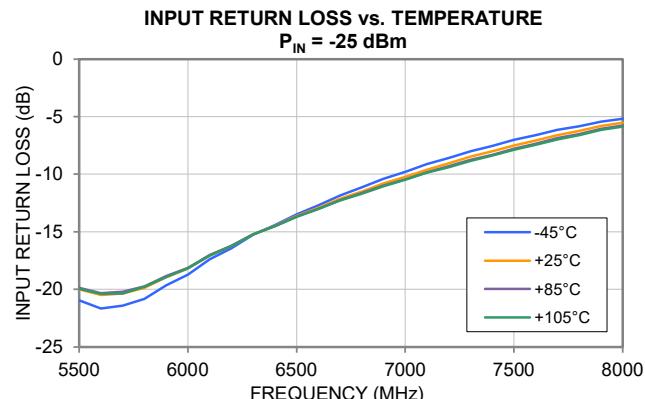
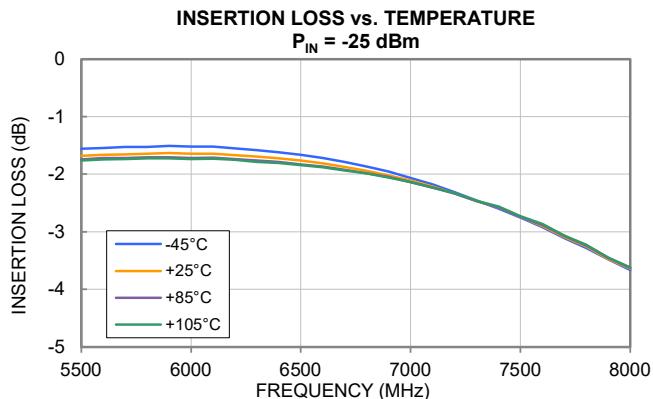
Low Noise Amplifier

TSY-83LN+

50Ω 0.4 to 8 GHz Bypass Mode Feature

TYPICAL PERFORMANCE GRAPHS IN BYPASS MODE

Note: The following data was taken on the Mini-Circuits Characterization Test Board TB-TSY-832LNC+ (Figure 3). All data taken at nominal conditions $V_{EN} = 0$ V, $V_{DD} = +6$ V, and R_{IADJ} = Open unless noted otherwise.





MMIC SURFACE MOUNT

Low Noise Amplifier

TSY-83LN+

50Ω 0.4 to 8 GHz Bypass Mode Feature

ABSOLUTE MAXIMUM RATINGS¹⁶

Parameter	Ratings	
Operating Temperature	-45°C to +105°C	
Storage Temperature	-65°C to +150°C	
Total Power Dissipation	0.83 W	
Junction Temperature ¹⁷	+150°C	
Input Power (CW)	Amplifier - ON	+22 dBm
	Amplifier - Bypass	+29 dBm
DC Voltage on RF-OUT	+14.5 V	
DC Voltage on RF-IN	+22 V	
DC Voltage on V _{DD}	+9 V	
Current I _{DD}	180 mA	
DC Voltage on V _{EN}	+9 V	
Current I _{EN}	60 mA	
Current I _{ADJ}	10 mA	

16. Permanent damage may occur if any of these are exceeded. Maximum ratings are not intended for continuous normal operations.

17. Peak temperature at top of Die

THERMAL RESISTANCE

Parameter	Ratings
Thermal Resistance (Θ_{JC}) ¹⁸	54.3°C/W

18. Θ_{JC} = (Hot Spot Temperature on Die - Temperature at Ground Lead)/Dissipated Power

ESD RATING

	Class	Voltage Range	Refence Standard
HBM	1A	250 V to < 500 V	ANSI/ESDA/JEDEC JS-001-2017
CDM	C3	≥ 1000 V	JESD22-C101F



ESD HANDLING PRECAUTION: This device is designed to be Class 1A for HBM. Static charges may easily produce potentials higher than this with improper handling and can discharge into DUT and damage it. As a preventive measure Industry standard ESD handling precautions should be used at all times to protect the device from ESD damage.

MSL RATING

Moisture Sensitivity: MSL1 in accordance with IPC/JEDEC J-STD-020E/JEDEC J-STD-033C



MMIC SURFACE MOUNT

Low Noise Amplifier

TSY-83LN+

50Ω 0.4 to 8 GHz Bypass Mode Feature

FUNCTIONAL DIAGRAM

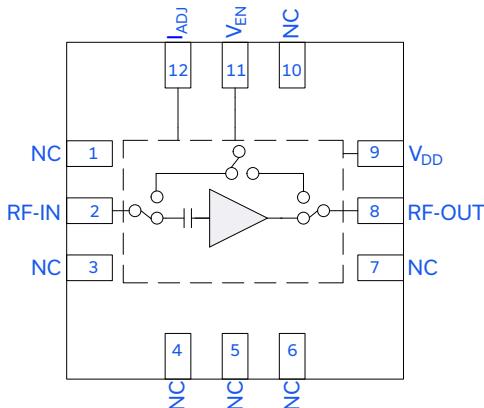


Figure 1. TSY-83LN+ Functional Diagram. Amplifier shown in ON mode.

PAD DESCRIPTION

Function	Pad Number	Description (Refer to Figure 1)
RF-IN	2	RF-IN Pad connects to RF-Input port.
RF-OUT	8	RF-OUT Pad connects to RF-Output port.
V _{DD}	9	DC Input Pad connects to device voltage input port.
V _{EN}	11	DC Input Pad connects to enable voltage input port.
I _{ADJ} ¹⁹	12	Current Adjustment Pad connects to port, I _{ADJ} . Port left open for nominal operation. I _{ADJ} can be adjusted with the use of an external resistor (see Figures 2 and 3).
GND	Paddle, Index	Connects to ground.
NC	1, 3-7, 10	Not used internally. Connected to ground on test board.

19. I_{ADJ} port not intended as a voltage input port. Permanent damage can occur with a voltage applied to this port.

CHARACTERIZATION BOARD

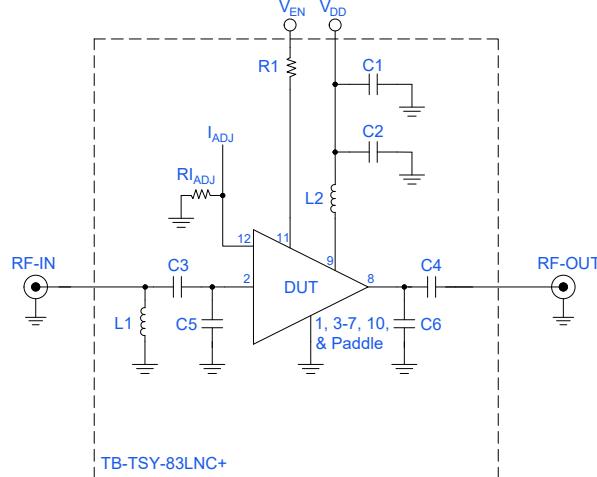
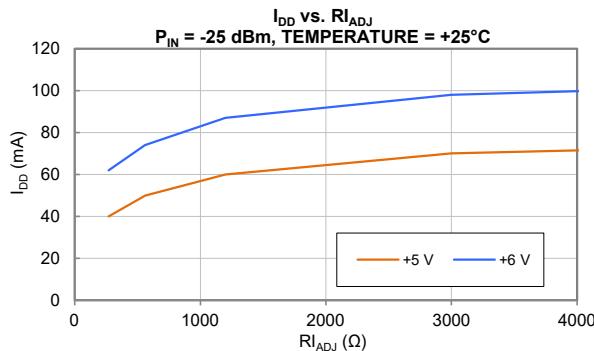


Figure 2. TSY-83LN+ Wide Band Characterization and Application Circuit. Used for characterization of device from 0.4 to 6 GHz.



Electrical Parameters and Conditions

Gain, Return Loss, Output Power at 1dB Compression (P_{1dB}), Output IP3 (OIP3), and Noise Figure measured using N5242A PNA-X Microwave Network Analyzer.

Conditions:

1. Gain and Return Loss: P_{IN} = -25 dBm
2. Output IP3 (OIP3): Two tones, spaced 1 MHz apart, 0 dBm/Tone at output.

Power ON/Power OFF Sequence

Caution: Permanent damage to the device will occur if the Power ON and Power OFF sequences are not followed.

Power ON:

- 1) Set V_{DD} = +5 or +6 V.
- 2) Set V_{EN} = +5 or +6 V for Amplifier-ON Mode or V_{EN} = 0 V for Bypass Mode.
- 3) Turn on V_{DD} and V_{EN}.
- 4) Apply RF signal.

Power OFF:

- 1) Turn off RF signal.
- 2) Turn off V_{DD} and V_{EN}.

Component	Value	Size	Part Number	Manufacturer
C1	0.01 μF	0402	GRM155R71E103KA01D	Murata
C2	10 pF	0402	GJM1555C1H100JB01D	Murata
C3, C4	100 pF	0402	GRM1555C1H101JA01D	Murata
C5	0.4 pF	0402	GJM1555C1HR40WB01D	Murata
C6	0.3 pF	0402	GJM1555C1HR30WB01D	Murata
R1	0Ω	0402	RK73Z1ETTP	KOA Speer
R _{I_{ADJ}} ²⁰	Not Populated	0402	--	--
L1	22 nH	0402	LQG15HS22NG02D	Murata
L2	39 nH	0402	0402CS-39NXGRW	Coilcraft

20. R_{I_{ADJ}} resistor not needed for nominal operation. See I_{DD} versus R_{I_{ADJ}} plot for typical current consumption.



MMIC SURFACE MOUNT

Low Noise Amplifier

TSY-83LN+

50Ω 0.4 to 8 GHz Bypass Mode Feature

CHARACTERIZATION BOARD

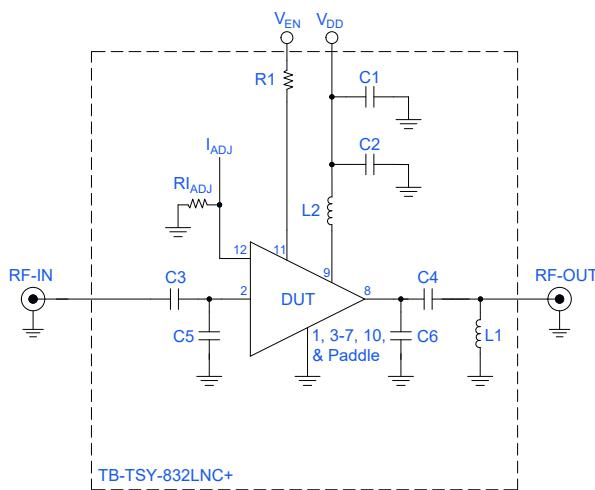


Figure 3. TSY-83LN+ Narrow Band Characterization and Application Circuit. Used for characterization of device from 5.5 to 8 GHz.

Electrical Parameters and Conditions

Gain, Return Loss, Output Power at 1dB Compression (P_{1dB}), Output IP3 (OIP3), and Noise Figure measured using N5242A PNA-X Microwave Network Analyzer.

Conditions:

1. Gain and Return Loss: $P_{IN} = -25$ dBm
2. Output IP3 (OIP3): Two tones, spaced 1 MHz apart, 0 dBm/Tone at output.

Component	Value	Size	Part Number	Manufacturer
C1	0.01 μ F	0402	GRM155R71E103KA01D	Murata
C2	10 pF	0402	GJM1555C1H100JB01D	Murata
C3, C4	100 pF	0402	GRM1555C1H101JA01D	Murata
C5	0.4 pF	0402	GJM1555C1HR40WB01D	Murata
C6	0.3 pF	0402	GJM1555C1HR30WB01D	Murata
R1	0Ω	0402	RK73Z1ETTP	KOA Speer
R _{I_{ADJ}} ²¹	Not Populated	0402	--	--
L1	2 nH	0402	0402CS-2N0XGRW	Coilcraft
L2	5.6 nH	0402	0402CS-5N6XGRW	Coilcraft

21. A_{DJ} resistor not needed for nominal operation. See I_{DD} versus R_{I_{ADJ}} plot for typical current consumption.

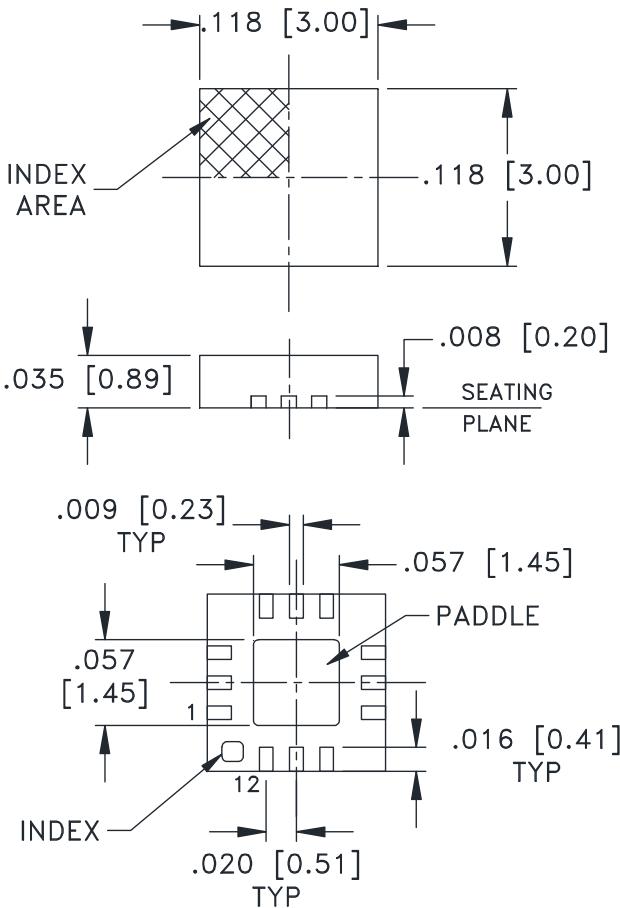
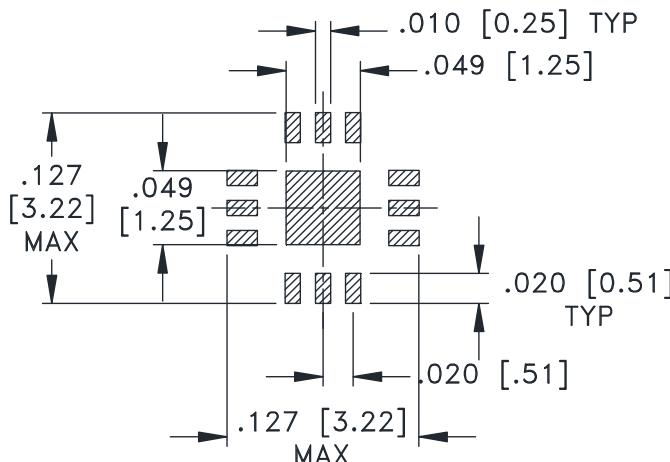


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Low Noise Amplifier

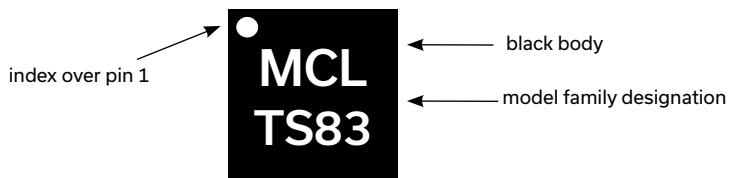
TSY-83LN+

50Ω 0.4 to 8 GHz Bypass Mode Feature

CASE STYLE DRAWINGPCB Land Pattern

SUGGESTED LAYOUT,
TOLERANCE TO BE WITHIN $\pm .002$

Weight: .02 Grams

Dimensions are in inches [mm]. Tolerances in inches: 2 Pl. $\pm .01$; 3 Pl. $\pm .004$ **PRODUCT MARKING**

Marking may contain other features or characters for internal lot control

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50Ω 0.4 to 8 GHz Bypass Mode Feature

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ADDITIONAL DETAILED TECHNICAL INFORMATION IS AVAILABLE ON OUR DASH BOARD. TO ACCESS [CLICK HERE](#)

Performance Data and Graphs	Data Table Swept Graphs S-Parameter (S2P Files) Data Set (.zip file)
Case Style	DQ1225. Plastic package, exposed paddle, Lead Finish: Matte-Tin
RoHS Status	Compliant
Tape & Reel Standard quantities available on reel	F66 7" reels with 20, 50, 100, 200, 500, 1000, 2000, or 3000 devices
Suggested Layout for PCB Design	PL-775
Evaluation Board	TB-TSY-83LNC+ (Wide Band, 0.4 to 6 GHz) TB-TSY-832LNC+ (Narrow Band, 5.5 to 8 GHz) Gerber File
Environmental Ratings	ENV08T1

NOTES

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the standard terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/terms/viewterm.html

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +4.75\text{ V}$, $V_{EN} = +4.75\text{ V}$, $I_{DD} = 68\text{ mA}$, $I_{EN} = 2.06\text{ mA}$ @ Temperature = $+25^\circ\text{C}$

FREQ (MHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure										
200.00	14.8	-32.9	-1.8	-4.5	1.4	0.9	18.8	20.7	4.7	29.0	30.7	30.4	30.0	29.8	29.7	29.5
300.00	19.5	-28.1	-5.6	-8.7	1.2	0.8	19.0	20.8	2.4	30.3	29.5	29.8	29.7	29.9	29.4	29.4
400.00	21.1	-26.5	-11.5	-14.9	1.2	0.7	19.7	21.2	1.8	31.0	31.4	30.6	31.5	31.1	30.7	30.5
500.00	21.4	-26.1	-17.5	-18.9	1.1	0.7	20.1	21.3	1.6	31.0	32.3	31.3	31.6	31.5	31.3	31.0
600.00	21.5	-26.1	-19.6	-18.3	1.1	0.6	20.5	21.4	1.4	31.0	31.1	32.3	32.4	32.2	32.0	31.8
700.00	21.5	-26.1	-18.2	-17.2	1.1	0.6	20.7	21.7	1.4	30.9	32.1	31.5	31.3	31.1	30.9	30.7
800.00	21.5	-26.1	-17.1	-16.7	1.1	0.6	20.8	21.8	1.4	33.4	31.5	31.9	31.9	31.8	31.6	31.6
900.00	21.5	-26.2	-16.4	-16.6	1.1	0.6	20.9	21.9	1.4	31.0	31.5	32.0	31.9	31.8	31.5	31.4
1000.00	21.5	-26.2	-16.0	-16.8	1.1	0.6	20.9	21.9	1.4	31.5	31.7	31.9	31.6	31.5	31.4	31.4
1100.00	21.5	-26.2	-15.9	-17.3	1.1	0.7	20.8	21.9	1.4	29.9	31.2	32.1	31.7	31.7	31.4	31.2
1200.00	21.5	-26.3	-15.8	-18.1	1.1	0.7	20.9	22.0	1.4	30.9	31.0	31.7	31.4	31.1	31.0	30.9
1300.00	21.5	-26.3	-15.8	-19.1	1.1	0.7	21.0	22.1	1.5	31.1	31.3	30.9	30.9	30.8	30.7	30.6
1400.00	21.5	-26.4	-15.9	-20.4	1.1	0.7	20.8	21.9	1.4	31.7	30.5	30.9	30.9	30.7	30.6	30.6
1500.00	21.5	-26.4	-15.9	-22.2	1.1	0.7	20.8	22.1	1.4	29.9	30.1	30.2	30.1	30.0	29.9	29.7
1600.00	21.5	-26.5	-15.6	-24.5	1.2	0.7	20.8	22.0	1.5	29.4	29.8	30.4	30.3	30.0	29.9	29.8
1700.00	21.5	-26.6	-15.3	-26.5	1.2	0.7	21.0	22.3	1.4	31.7	30.4	30.2	30.1	30.0	29.9	29.9
1800.00	21.5	-26.5	-15.1	-29.7	1.2	0.7	20.6	22.1	1.5	29.7	30.0	29.9	30.0	29.9	29.7	29.6
1900.00	21.5	-26.6	-14.8	-30.4	1.2	0.7	20.6	22.1	1.5	29.9	29.5	29.6	29.4	29.4	29.2	29.1
2000.00	21.5	-26.7	-14.3	-27.5	1.2	0.7	20.4	22.0	1.6	30.2	30.0	29.7	29.6	29.7	29.4	29.3
2100.00	21.5	-26.7	-13.8	-24.8	1.2	0.7	20.5	22.2	1.6	30.1	30.0	29.5	29.8	29.5	29.3	29.2
2200.00	21.5	-26.8	-13.3	-22.5	1.2	0.7	20.3	22.1	1.6	29.7	29.4	29.6	29.5	29.3	29.2	29.2
2300.00	21.5	-26.9	-12.8	-20.6	1.2	0.8	20.3	22.2	1.6	30.6	29.5	29.2	29.6	29.4	29.3	29.2
2400.00	21.5	-27.1	-12.4	-19.0	1.2	0.8	20.3	22.4	1.6	28.5	27.7	27.9	27.7	27.5	27.3	27.2
2500.00	21.4	-27.1	-12.0	-17.9	1.2	0.8	20.1	22.4	1.6	27.6	27.5	27.7	27.7	27.5	27.2	27.1
2600.00	21.4	-27.3	-11.6	-16.9	1.2	0.8	19.9	22.5	1.7	28.1	27.9	27.7	27.6	27.5	27.3	27.1
2700.00	21.4	-27.4	-11.3	-16.2	1.2	0.8	19.4	22.0	1.7	27.7	28.1	27.9	27.8	27.6	27.4	27.2
2800.00	21.3	-27.5	-11.0	-15.5	1.2	0.8	19.3	21.8	1.8	27.9	27.4	27.3	27.2	27.0	26.8	26.6
2900.00	21.3	-27.6	-10.6	-14.7	1.2	0.8	19.0	21.7	1.8	27.8	27.7	27.7	27.3	27.1	26.8	26.6
3000.00	21.2	-27.7	-10.3	-14.1	1.2	0.8	19.2	22.0	1.8	26.1	26.4	26.3	26.3	26.0	25.7	25.4
3100.00	21.2	-27.8	-10.0	-13.7	1.2	0.8	19.1	22.4	1.8	26.2	26.3	26.5	26.3	26.0	25.7	25.5
3200.00	21.2	-27.8	-9.8	-13.4	1.2	0.8	19.0	22.2	1.8	27.0	27.1	27.0	26.9	26.6	26.4	26.2
3300.00	21.2	-27.8	-9.7	-13.2	1.2	0.8	18.9	22.1	1.8	26.4	26.6	26.5	26.3	26.2	25.9	25.7
3400.00	21.2	-27.9	-9.6	-13.0	1.2	0.8	18.8	22.0	1.8	26.7	27.1	26.9	26.8	26.6	26.4	26.2
3500.00	21.2	-27.9	-9.6	-13.0	1.2	0.8	18.8	22.1	1.8	26.3	26.7	26.4	26.3	26.1	25.8	25.7
3600.00	21.3	-27.9	-9.6	-13.1	1.2	0.8	18.8	22.3	1.7	26.3	26.5	26.4	26.2	26.0	25.8	25.8
3700.00	21.3	-27.9	-9.6	-13.2	1.2	0.8	19.0	22.2	1.7	27.5	27.8	27.4	27.4	27.3	27.1	26.8
3800.00	21.3	-27.9	-9.8	-13.4	1.2	0.8	19.3	22.2	1.7	26.7	27.1	27.1	26.9	26.7	26.5	26.3
3900.00	21.4	-28.0	-9.9	-13.6	1.2	0.8	19.5	22.3	1.7	26.8	27.2	27.2	27.0	26.7	26.5	26.2
4000.00	21.4	-28.0	-10.1	-13.9	1.2	0.8	19.5	22.5	1.7	26.9	27.2	26.6	26.8	26.6	26.4	26.1
4100.00	21.4	-28.0	-10.4	-14.3	1.2	0.8	19.5	22.5	1.7	26.8	26.2	26.3	26.1	25.9	25.6	25.3
4200.00	21.5	-28.0	-10.6	-14.9	1.2	0.8	19.7	22.4	1.7	26.6	26.8	26.4	26.2	26.1	25.8	25.5
4300.00	21.6	-28.2	-10.9	-15.2	1.3	0.8	19.6	22.6	1.7	26.4	26.7	26.5	26.3	26.2	25.9	25.5
4400.00	21.6	-28.1	-11.4	-15.8	1.3	0.8	19.6	22.8	1.7	26.7	26.7	26.5	26.3	26.1	25.8	25.4
4500.00	21.7	-28.1	-11.8	-16.4	1.3	0.8	19.3	23.0	1.7	26.4	26.4	26.2	26.0	25.8	25.4	25.1
4600.00	21.7	-28.3	-12.4	-17.0	1.3	0.8	18.7	23.0	1.6	26.1	26.2	25.9	25.7	25.5	25.1	24.7
4700.00	21.8	-28.2	-13.0	-18.0	1.3	0.8	18.9	22.7	1.6	26.1	26.1	26.2	25.9	25.6	25.3	25.0
4800.00	21.9	-28.3	-13.4	-18.4	1.3	0.8	19.3	22.4	1.7	26.8	26.3	26.1	26.4	26.3	25.8	25.5
4900.00	21.9	-28.4	-14.2	-18.9	1.3	0.8	19.3	22.4	1.7	25.4	25.5	25.5	25.3	25.0	24.7	24.4
5000.00	21.9	-28.4	-14.8	-20.0	1.3	0.8	19.5	22.4	1.7	25.5	25.4	25.1	25.1	24.8	24.5	24.3
5100.00	22.0	-28.5	-15.2	-20.2	1.3	0.8	19.7	22.2	1.6	25.4	25.7	25.4	25.3	25.1	24.9	24.7
5200.00	22.0	-28.6	-16.2	-20.9	1.3	0.8	19.8	22.1	1.7	25.7	25.8	25.9	25.8	25.6	25.5	25.4
5300.00	22.1	-28.6	-16.1	-21.3	1.3	0.8	19.9	22.4	1.7	26.5	26.3	26.0	26.0	25.9	25.7	25.5
5400.00	22.1	-28.8	-16.3	-20.8	1.3	0.8	19.5	22.5	1.7	25.5	25.4	25.3	25.1	24.9	24.6	24.5
5500.00	22.1	-28.8	-16.7	-21.7	1.3	0.8	18.8	22.4	1.7	24.6	25.1	24.7	24.6	24.3	24.0	23.9
5600.00	22.2	-28.9	-15.5	-21.1	1.3	0.8	18.2	22.2	1.7	24.5	24.7	24.6	24.5	24.1	23.6	23.4
5700.00	22.0	-29.2	-15.2	-20.1	1.4	0.8	18.1	22.0	1.8	24.5	24.8	24.6	24.4	24.1	23.5	23.3
5800.00	22.1	-29.0	-14.6	-20.4	1.3	0.8	18.1	21.7	1.8	24.1	24.4	24.3	23.9	23.6	23.1	23.0
5900.00	22.1	-29.4	-13.0	-18.7	1.4	0.9	17.9	21.6	1.8	24.7	24.6	24.4	24.1	23.7	23.2	22.8
6000.00	21.9	-29.4	-12.9	-18.3	1.4	0.9	17.7	21.1	2.0	24.3	23.7	23.0	23.4	22.5	22.5	22.7
6100.00	22.1	-29.5	-11.5	-17.5	1.4	0.9	17.8	20.7	1.8	24.3	24.1	23.9	23.7	23.4	23.0	23.1
6200.00	21.9	-30.0	-10.4	-15.7	1.4	0.9	17.8	20.2	1.9	23.8	23.7	23.5	23.3	23.0	22.7	22.9
6300.00	21.8	-29.9	-10.0	-15.3	1.4	0.9	17.7	19.8	1.9	24.2	24.1	23.8	23.6	23.3	23.1	23.3
6400.00	21.8	-30.2	-8.8</													

TEST CONDITIONS: $V_{DD} = +4.75$ V, $V_{EN} = +4.75$ V, $I_{DD} = 68$ mA, $I_{EN} = 2.06$ mA @ Temperature = $+25^\circ\text{C}$

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	37.8	37.7	37.7	37.6	37.5	37.2	36.9
1000.0	36.8	36.7	36.7	36.6	36.4	36.1	35.8
2000.0	35.4	35.1	35.0	34.8	34.6	34.2	33.9
4000.0	44.2	44.1	43.9	43.8	43.4	43.0	42.9
6000.0	32.1	32.0	31.7	31.3	30.9	30.4	30.2
8000.0	35.7	35.2	34.9	35.1	36.1	37.9	40.6

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +4.75$ V, $V_{EN} = +4.75$ V, $I_{DD} = 73$ mA, $I_{EN} = 2.05$ mA @ Temperature = $+25^\circ\text{C}$

FREQ (MHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure (dBm)										
5500.00	21.4	-29.8	-9.8	-8.9	1.4	0.8	18.6	22.1	1.6	25.5	25.5	25.3	25.1	24.9	24.5	
5600.00	21.5	-29.8	-9.6	-9.0	1.4	0.8	18.8	22.0	1.6	24.7	24.2	24.3	24.1	23.8	23.4	
5700.00	21.5	-29.6	-10.0	-9.2	1.4	0.8	18.0	22.0	1.6	24.8	24.8	24.5	24.4	24.1	23.6	
5800.00	21.7	-29.8	-9.7	-9.3	1.4	0.8	17.4	22.1	1.6	24.3	24.7	24.4	24.4	24.0	23.6	
5900.00	21.7	-29.7	-10.0	-9.6	1.4	0.8	17.3	21.6	1.6	24.3	24.1	23.9	23.7	23.4	22.9	
6000.00	21.8	-29.9	-9.7	-9.6	1.4	0.8	17.6	21.1	1.6	23.0	22.8	22.7	22.4	22.0	21.4	
6100.00	21.8	-29.8	-10.0	-10.0	1.4	0.8	17.9	21.1	1.6	23.8	23.7	23.5	23.2	22.8	22.9	
6200.00	21.9	-30.0	-9.7	-10.0	1.4	0.8	18.1	20.8	1.6	23.5	23.2	23.3	23.1	22.9	22.9	
6300.00	22.0	-30.0	-10.0	-10.4	1.4	0.8	18.3	21.2	1.6	24.7	24.6	24.4	24.3	24.2	24.0	
6400.00	22.1	-30.2	-9.6	-10.3	1.4	0.8	18.6	21.1	1.6	24.6	24.4	24.4	24.2	24.1	24.0	
6500.00	22.0	-30.1	-10.0	-10.8	1.4	0.8	18.7	21.0	1.6	24.8	24.6	24.4	24.4	24.3	24.2	
6600.00	22.2	-30.4	-9.7	-10.8	1.4	0.8	18.8	20.7	1.6	24.8	24.4	24.4	24.5	24.4	24.3	
6700.00	22.1	-30.4	-10.1	-11.3	1.4	0.8	18.4	20.3	1.6	24.6	24.5	24.4	24.4	24.3	24.4	
6800.00	22.2	-30.7	-9.8	-11.3	1.5	0.8	18.6	20.4	1.7	25.1	25.1	24.9	24.9	24.8	24.9	
6900.00	22.2	-30.7	-10.2	-11.9	1.5	0.9	18.9	20.6	1.7	25.1	25.2	25.0	25.1	25.2	25.3	
7000.00	22.3	-31.1	-10.0	-12.0	1.5	0.9	19.0	20.5	1.7	24.6	24.6	24.7	24.8	24.8	24.9	
7100.00	22.3	-31.0	-10.5	-12.7	1.5	0.9	19.0	20.5	1.7	25.0	25.1	25.0	25.1	25.1	25.2	
7200.00	22.3	-31.5	-10.3	-12.8	1.6	0.9	19.4	20.6	1.8	25.5	25.1	25.0	25.1	25.2	25.4	
7300.00	22.2	-31.5	-10.8	-13.7	1.6	0.9	19.3	20.6	1.8	24.7	24.7	24.5	24.6	24.7	24.8	
7400.00	22.2	-32.1	-10.5	-13.9	1.7	0.9	19.2	20.4	1.9	24.9	24.7	24.7	24.8	24.8	25.0	
7500.00	22.1	-32.2	-11.0	-15.1	1.8	0.9	18.7	20.1	1.9	25.0	24.8	24.7	24.8	25.0	25.6	
7600.00	22.0	-32.9	-10.4	-15.2	1.9	1.0	19.0	20.2	2.0	24.6	24.6	24.7	24.8	24.9	25.3	
7700.00	21.8	-33.2	-10.7	-16.8	2.0	1.0	19.0	20.1	2.1	23.6	23.5	23.4	23.5	23.6	23.8	
7800.00	21.6	-34.0	-9.8	-16.6	2.1	1.0	18.7	19.8	2.2	24.8	24.4	24.3	24.5	24.6	24.8	
7900.00	21.3	-34.4	-9.8	-18.3	2.3	1.0	18.4	19.5	2.3	24.5	24.3	24.5	24.5	24.6	24.9	
8000.00	20.9	-35.7	-8.5	-17.0	2.6	1.1	17.8	18.9	2.4	23.9	23.8	23.9	23.9	24.2	24.6	
8100.00	20.4	-36.0	-8.2	-17.3	2.8	1.1	18.0	19.0	2.5	24.0	23.7	23.8	23.9	24.1	24.4	
8200.00	19.7	-37.7	-6.8	-14.6	3.3	1.2	18.0	18.9	2.7	22.9	22.9	23.0	23.1	23.3	23.8	
8300.00	19.2	-37.7	-6.5	-13.8	3.4	1.2	18.1	18.8	2.8	23.2	23.5	23.4	23.4	23.6	24.0	
8400.00	18.0	-40.6	-5.3	-11.2	4.7	1.2	17.9	18.5	2.9	23.6	23.5	23.5	23.6	23.7	24.1	
8500.00	17.4	-40.7	-4.8	-10.3	4.7	1.2	17.5	18.0	3.1	22.5	22.4	22.4	22.5	22.8	23.4	

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
5500.0	36.1	36.0	35.9	35.6	35.2	34.9	34.6
6000.0	33.1	33.0	32.8	32.4	32.0	31.5	31.2
7000.0	43.6	43.4	43.2	42.9	42.6	42.3	42.3
8000.0	51.6	51.4	51.2	50.8	50.5	50.2	50.3
8500.0	59.9	59.6	59.3	59.0	58.6	58.7	59.4

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions**Definitions:**

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +4.75$ V, $V_{EN} = 0$ V, $I_{DD} = 3$ mA, $I_{EN} = 0$ mA @ Temperature = $+25^\circ\text{C}$

FREQ (MHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	K	Stability Measure	Noise Figure (dB)
200.00	-3.7	-3.8	-4.0	-8.6	1.1	0.8	3.3
300.00	-2.3	-2.4	-6.7	-11.5	1.0	0.7	2.1
400.00	-1.7	-1.8	-9.3	-13.7	1.0	0.5	1.5
500.00	-1.4	-1.4	-12.0	-15.6	1.0	0.5	1.4
600.00	-1.2	-1.3	-15.0	-17.0	1.0	0.4	1.3
700.00	-1.2	-1.2	-18.2	-18.1	1.0	0.4	1.2
800.00	-1.1	-1.2	-22.3	-18.4	1.0	0.4	1.3
900.00	-1.1	-1.2	-27.9	-18.2	1.0	0.4	1.2
1000.00	-1.1	-1.2	-33.3	-17.8	1.0	0.4	1.1
1100.00	-1.1	-1.2	-27.6	-17.4	1.0	0.4	1.3
1200.00	-1.1	-1.2	-23.5	-17.1	1.0	0.4	1.2
1300.00	-1.1	-1.2	-20.8	-16.6	1.0	0.4	1.7
1400.00	-1.1	-1.2	-19.0	-16.1	1.0	0.4	1.2
1500.00	-1.2	-1.3	-17.5	-15.7	1.0	0.4	1.2
1600.00	-1.2	-1.3	-16.4	-15.5	1.0	0.4	1.4
1700.00	-1.2	-1.4	-15.6	-15.5	1.0	0.5	1.2
1800.00	-1.3	-1.4	-14.9	-15.4	1.0	0.5	1.6
1900.00	-1.3	-1.5	-14.4	-15.2	1.0	0.5	1.3
2000.00	-1.3	-1.5	-14.0	-15.1	1.0	0.5	1.7
2100.00	-1.4	-1.6	-13.7	-15.3	1.0	0.5	1.5
2200.00	-1.4	-1.6	-13.5	-15.6	1.0	0.5	1.5
2300.00	-1.4	-1.6	-13.4	-15.8	1.0	0.5	1.6
2400.00	-1.4	-1.7	-13.3	-16.2	1.0	0.5	1.9
2500.00	-1.5	-1.7	-13.3	-16.6	1.0	0.6	2.0
2600.00	-1.5	-1.8	-13.4	-17.3	1.0	0.6	2.1
2700.00	-1.5	-1.8	-13.5	-18.1	1.1	0.6	1.9
2800.00	-1.5	-1.9	-13.7	-19.0	1.1	0.6	2.1
2900.00	-1.5	-1.9	-13.9	-19.8	1.1	0.6	2.3
3000.00	-1.5	-1.9	-14.0	-21.0	1.1	0.6	2.2
3100.00	-1.6	-1.9	-14.1	-22.7	1.1	0.6	2.0
3200.00	-1.6	-1.9	-14.2	-24.7	1.1	0.6	2.1
3300.00	-1.6	-1.9	-14.3	-26.8	1.1	0.6	1.8
3400.00	-1.6	-1.9	-14.4	-29.4	1.1	0.6	2.1
3500.00	-1.6	-1.9	-14.3	-30.9	1.1	0.6	1.9
3600.00	-1.6	-1.9	-14.3	-28.2	1.1	0.6	1.7
3700.00	-1.6	-1.9	-14.2	-25.1	1.1	0.6	2.3
3800.00	-1.6	-1.9	-14.0	-22.7	1.1	0.6	1.9
3900.00	-1.6	-1.9	-13.8	-21.0	1.1	0.6	1.9
4000.00	-1.7	-2.0	-13.5	-19.3	1.1	0.6	2.0
4100.00	-1.7	-2.0	-13.2	-17.7	1.1	0.6	1.6
4200.00	-1.7	-2.0	-12.8	-16.7	1.1	0.6	2.2
4300.00	-1.7	-2.0	-12.6	-15.8	1.1	0.6	2.0
4400.00	-1.7	-2.1	-12.3	-15.0	1.1	0.6	1.7
4500.00	-1.8	-2.1	-12.0	-14.3	1.1	0.6	2.0
4600.00	-1.8	-2.2	-11.8	-13.6	1.1	0.6	1.9
4700.00	-1.8	-2.2	-11.6	-13.2	1.1	0.6	2.3
4800.00	-1.8	-2.2	-11.4	-12.9	1.1	0.6	1.7
4900.00	-1.9	-2.2	-11.3	-12.5	1.1	0.6	2.3
5000.00	-1.8	-2.3	-11.1	-12.1	1.1	0.6	2.6
5100.00	-1.9	-2.3	-11.0	-11.9	1.1	0.6	1.8
5200.00	-1.9	-2.3	-10.9	-11.7	1.1	0.6	3.3
5300.00	-1.8	-2.3	-10.9	-11.6	1.1	0.6	1.8
5400.00	-1.9	-2.4	-10.9	-11.5	1.1	0.6	1.8
5500.00	-1.8	-2.3	-10.9	-11.3	1.1	0.6	2.0
5600.00	-1.8	-2.3	-11.1	-11.4	1.1	0.6	2.4
5700.00	-1.8	-2.4	-11.1	-11.4	1.1	0.6	2.6
5800.00	-1.8	-2.3	-11.3	-11.4	1.1	0.6	2.6
5900.00	-1.8	-2.3	-11.6	-11.6	1.1	0.6	2.7
6000.00	-1.8	-2.3	-11.7	-11.5	1.1	0.6	2.1
6100.00	-1.7	-2.3	-12.0	-11.7	1.1	0.6	2.0
6200.00	-1.7	-2.3	-12.3	-12.0	1.1	0.6	2.2
6300.00	-1.7	-2.2	-12.6	-12.1	1.1	0.6	2.4
6400.00	-1.6	-2.2	-13.0	-12.3	1.1	0.6	1.8
6500.00	-1.7	-2.3	-13.2	-12.4	1.1	0.6	2.1
6600.00	-1.6	-2.2	-13.4	-12.4	1.1	0.6	1.2
6700.00	-1.6	-2.2	-13.9	-12.8	1.1	0.6	1.9
6800.00	-1.6	-2.3	-14.0	-12.9	1.1	0.6	1.8
6900.00	-1.6	-2.2	-14.1	-12.8	1.1	0.6	2.0
7000.00	-1.6	-2.3	-14.3	-12.9	1.1	0.6	2.4
7100.00	-1.7	-2.3	-14.1	-12.9	1.1	0.6	2.4
7200.00	-1.7	-2.3	-14.0	-12.8	1.1	0.6	1.4
7300.00	-1.7	-2.4	-13.8	-12.6	1.1	0.6	1.8
7400.00	-1.8	-2.4	-13.3	-12.2	1.1	0.6	2.5
7500.00	-1.8	-2.5	-12.9	-12.0	1.1	0.6	3.0
7600.00	-2.0	-2.6	-12.5	-11.7	1.1	0.6	2.5
7700.00	-2.0	-2.7	-11.7	-11.1	1.1	0.6	2.6
7800.00	-2.1	-2.8	-11.3	-10.7	1.1	0.6	2.3
7900.00	-2.3	-3.0	-10.7	-10.1	1.2	0.6	1.9
8000.00	-2.4	-3.0	-9.8	-9.5	1.1	0.6	2.2

TEST CONDITIONS: $V_{DD} = +4.75$ V, $V_{EN} = 0$ V, $I_{DD} = 3$ mA, $I_{EN} = 0$ mA @ Temperature = $+25^\circ\text{C}$

FREQ (MHz)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
400.0	41.1	40.5	37.6	32.9	27.7	21.2	17.1
1000.0	43.0	41.4	37.9	33.0	26.8	18.2	15.5
2000.0	44.9	44.0	42.5	38.9	33.9	26.9	18.6
4000.0	40.3	42.3	43.0	42.7	40.8	36.4	30.3
6000.0	43.3	44.0	44.5	43.6	40.0	34.3	26.2
8000.0	43.3	44.4	46.2	45.4	41.0	35.4	27.2

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	72.1	71.9	71.5	70.7	68.0	59.2	47.4
1000.0	71.0	71.2	71.4	71.6	69.7	60.7	55.2
2000.0	70.7	70.6	70.6	70.6	70.2	67.2	55.2
4000.0	74.8	74.7	74.7	74.7	74.9	75.1	74.9
6000.0	73.8	73.6	73.4	73.2	72.8	72.0	67.8
8000.0	84.6	84.6	84.5	84.5	84.3	83.6	80.9

FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
400.0	15.0	10.8
1000.0	13.1	10.9
2000.0	15.3	12.8
4000.0	17.7	14.9
6000.0	18.0	14.7
8000.0	18.6	13.5



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IF/RF MICROWAVE COMPONENTS

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +4.75 V, V_{EN} = 0 V, I_{DD} = 3 mA, I_{EN} = 0 mA @ Temperature = +25°C

FREQ (MHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)	FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
					K	Measure				
5500.00	-1.6	-2.2	-20.6	-18.1	1.1	0.6	2.3	5500.0	17.5	14.1
5600.00	-1.6	-2.2	-21.2	-18.1	1.1	0.6	2.2	6000.0	19.1	15.0
5700.00	-1.6	-2.2	-21.0	-17.8	1.1	0.6	2.1	7000.0	20.6	16.0
5800.00	-1.6	-2.2	-20.4	-17.2	1.1	0.6	2.0	8000.0	20.9	14.6
5900.00	-1.6	-2.3	-19.3	-16.6	1.1	0.6	1.9	8500.0	19.4	13.1
6000.00	-1.6	-2.3	-18.5	-15.8	1.1	0.6	2.1			
6100.00	-1.6	-2.3	-17.3	-15.0	1.1	0.6	2.2			
6200.00	-1.6	-2.3	-16.4	-14.3	1.1	0.6	2.4			
6300.00	-1.6	-2.4	-15.3	-13.6	1.1	0.6	2.5			
6400.00	-1.7	-2.4	-14.5	-13.0	1.1	0.6	2.0			
6500.00	-1.7	-2.5	-13.7	-12.3	1.1	0.6	2.4			
6600.00	-1.7	-2.5	-13.0	-11.8	1.1	0.6	2.3			
6700.00	-1.8	-2.6	-12.1	-11.2	1.1	0.6	2.2			
6800.00	-1.9	-2.7	-11.5	-10.7	1.1	0.6	2.2			
6900.00	-1.9	-2.7	-10.8	-10.1	1.1	0.6	2.4			
7000.00	-2.0	-2.8	-10.2	-9.6	1.1	0.6	2.4			
7100.00	-2.1	-2.9	-9.6	-9.1	1.1	0.6	2.3			
7200.00	-2.3	-3.0	-9.1	-8.7	1.1	0.6	2.3			
7300.00	-2.4	-3.2	-8.5	-8.2	1.1	0.6	2.4			
7400.00	-2.5	-3.3	-8.0	-7.8	1.1	0.6	2.5			
7500.00	-2.7	-3.5	-7.5	-7.3	1.1	0.6	2.6			
7600.00	-2.8	-3.6	-7.0	-7.0	1.1	0.6	2.5			
7700.00	-3.0	-3.8	-6.6	-6.5	1.1	0.6	2.6			
7800.00	-3.2	-3.9	-6.2	-6.2	1.1	0.6	2.4			
7900.00	-3.4	-4.2	-5.8	-5.8	1.1	0.6	3.1			
8000.00	-3.6	-4.3	-5.5	-5.6	1.2	0.6	3.5			
8100.00	-3.8	-4.5	-5.1	-5.2	1.2	0.6	3.6			
8200.00	-4.0	-4.7	-4.8	-5.0	1.2	0.6	3.4			
8300.00	-4.2	-4.9	-4.5	-4.7	1.2	0.6	2.9			
8400.00	-4.4	-5.1	-4.3	-4.6	1.2	0.6	3.6			
8500.00	-4.6	-5.3	-4.0	-4.2	1.2	0.6	2.6			

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
5500.0	70.1	70.0	69.8	69.7	69.3	68.4	64.6	42.1	42.5	43.1	42.4	41.6	38.6	32.9
6000.0	76.9	76.7	76.6	76.4	76.1	75.8	74.9	40.8	41.5	42.3	43.1	41.5	37.2	29.6
7000.0	88.7	88.6	88.5	88.3	88.1	87.7	86.9	41.4	40.4	41.7	42.8	40.4	36.0	30.3
8000.0	84.8	84.8	84.8	84.7	84.6	84.2	83.4	41.3	43.1	43.5	41.4	41.2	39.5	34.6
8500.0	92.1	92.0	92.0	91.8	91.7	94.0	90.3	42.4	43.5	44.1	42.9	38.0	30.4	19.0



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IF/RF MICROWAVE COMPONENTS



Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +5.0$ V, $V_{EN} = +5.0$ V, $I_{DD} = 75$ mA, $I_{EN} = 2.17$ mA @ Temperature = +25°C

FREQ (GHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure (dBm)										
200.00	15.0	-33.1	-1.8	-4.5	1.4	0.9	19.6	21.3	4.6	30.7	31.2	31.5	31.3	31.1	30.9	30.7
300.00	19.8	-28.2	-5.7	-8.7	1.2	0.8	19.8	21.4	2.4	29.9	32.5	30.8	31.0	31.2	30.7	30.7
400.00	21.2	-26.7	-11.8	-14.8	1.2	0.7	20.4	21.8	1.8	31.7	32.9	33.2	32.6	32.3	32.1	31.9
500.00	21.6	-26.4	-17.8	-18.2	1.1	0.7	20.8	21.8	1.6	33.2	31.5	33.4	33.1	32.6	32.7	32.4
600.00	21.7	-26.3	-19.1	-17.3	1.1	0.6	21.0	21.9	1.5	33.6	34.8	33.9	34.0	33.7	33.4	33.2
700.00	21.7	-26.3	-17.5	-16.3	1.1	0.6	21.2	22.2	1.4	30.5	32.8	33.1	32.6	32.4	32.4	32.1
800.00	21.7	-26.3	-16.4	-15.8	1.1	0.6	21.3	22.2	1.4	32.8	32.9	33.9	33.5	33.6	33.2	33.0
900.00	21.7	-26.4	-15.8	-15.7	1.1	0.6	21.4	22.4	1.4	32.5	33.3	33.6	33.2	33.1	32.9	32.7
1000.00	21.7	-26.4	-15.4	-15.9	1.1	0.6	21.4	22.4	1.4	32.5	32.6	33.3	33.0	32.9	32.9	32.7
1100.00	21.7	-26.5	-15.4	-16.4	1.1	0.7	21.3	22.3	1.4	32.0	32.7	33.2	33.1	32.8	32.6	32.6
1200.00	21.7	-26.5	-15.4	-17.0	1.1	0.7	21.5	22.5	1.4	32.8	32.4	32.8	32.4	32.3	32.3	32.2
1300.00	21.7	-26.5	-15.5	-17.9	1.1	0.7	21.5	22.5	1.4	32.3	31.8	32.3	32.3	32.2	32.0	31.9
1400.00	21.7	-26.6	-15.7	-19.0	1.1	0.7	21.3	22.4	1.4	32.5	32.4	32.9	32.2	32.2	32.0	32.0
1500.00	21.7	-26.6	-15.8	-20.4	1.1	0.7	21.4	22.6	1.4	32.6	31.3	31.2	31.5	31.4	31.2	31.0
1600.00	21.7	-26.7	-15.8	-22.3	1.2	0.7	21.4	22.5	1.4	31.1	31.5	31.6	31.3	31.3	31.2	31.1
1700.00	21.7	-26.7	-15.5	-24.0	1.2	0.7	21.5	22.7	1.4	32.2	31.4	31.8	31.6	31.5	31.2	31.1
1800.00	21.7	-26.8	-15.5	-26.9	1.2	0.7	21.2	22.6	1.5	30.4	30.5	31.6	31.1	31.1	30.9	30.9
1900.00	21.8	-26.8	-15.2	-29.8	1.2	0.7	21.2	22.6	1.5	31.2	31.3	30.8	30.8	30.7	30.5	30.3
2000.00	21.7	-26.9	-14.9	-29.6	1.2	0.7	21.0	22.5	1.5	30.8	30.5	31.3	31.0	30.9	30.8	30.6
2100.00	21.7	-27.0	-14.4	-27.1	1.2	0.7	21.1	22.7	1.6	31.3	31.0	30.6	31.1	30.7	30.6	30.5
2200.00	21.7	-27.0	-13.9	-24.5	1.2	0.7	20.9	22.6	1.6	31.0	31.1	30.7	30.8	30.6	30.5	30.4
2300.00	21.7	-27.1	-13.4	-22.2	1.2	0.7	20.9	22.7	1.6	29.5	30.7	31.2	30.6	30.6	30.5	30.4
2400.00	21.7	-27.2	-12.9	-20.4	1.2	0.8	20.8	22.9	1.7	28.5	28.8	28.9	28.8	28.6	28.4	28.4
2500.00	21.7	-27.3	-12.6	-19.1	1.2	0.8	20.6	22.9	1.7	28.4	28.7	29.0	28.9	28.7	28.5	28.3
2600.00	21.6	-27.4	-12.2	-18.0	1.2	0.8	20.3	23.0	1.7	29.1	28.6	29.2	29.1	28.8	28.6	28.3
2700.00	21.6	-27.5	-11.8	-17.1	1.2	0.8	19.8	22.5	1.7	28.7	29.4	29.0	28.9	28.7	28.4	28.4
2800.00	21.6	-27.7	-11.5	-16.3	1.2	0.8	19.7	22.3	1.8	28.6	28.7	28.4	28.6	28.3	28.1	27.8
2900.00	21.5	-27.8	-11.1	-15.4	1.2	0.8	19.4	22.1	1.8	29.5	29.0	28.9	28.7	28.4	28.2	28.2
3000.00	21.5	-27.8	-10.7	-14.8	1.2	0.8	19.7	22.5	1.8	27.3	27.8	27.6	27.5	27.3	27.0	26.6
3100.00	21.5	-27.9	-10.4	-14.3	1.2	0.8	19.6	22.8	1.8	27.5	27.3	27.6	27.5	27.3	27.0	26.6
3200.00	21.5	-27.9	-10.2	-14.0	1.2	0.8	19.6	22.7	1.8	27.6	28.0	28.3	28.1	27.9	27.7	27.4
3300.00	21.5	-27.9	-10.0	-13.8	1.2	0.8	19.4	22.5	1.7	27.9	27.5	27.8	27.5	27.2	26.9	26.9
3400.00	21.5	-28.0	-9.9	-13.6	1.2	0.8	19.3	22.3	1.8	27.4	28.2	28.2	28.0	27.9	27.7	27.4
3500.00	21.5	-28.1	-9.9	-13.5	1.2	0.8	19.3	22.5	1.8	27.7	27.5	27.6	27.6	27.4	27.1	26.8
3600.00	21.5	-28.1	-9.9	-13.7	1.2	0.8	19.3	22.7	1.7	27.8	28.0	27.7	27.7	27.5	27.2	27.0
3700.00	21.6	-28.1	-9.9	-13.8	1.2	0.8	19.6	22.7	1.7	28.0	29.3	28.7	28.5	28.5	28.3	28.1
3800.00	21.6	-28.1	-10.1	-14.0	1.2	0.8	19.9	22.7	1.7	28.2	28.1	28.2	28.1	28.0	27.8	27.6
3900.00	21.6	-28.1	-10.2	-14.2	1.2	0.8	20.1	22.7	1.7	28.7	28.1	28.1	27.9	27.7	27.5	27.2
4000.00	21.7	-28.2	-10.4	-14.5	1.2	0.8	20.1	22.9	1.7	28.5	27.7	28.0	27.9	27.9	27.6	27.4
4100.00	21.7	-28.2	-10.7	-15.0	1.2	0.8	20.1	23.0	1.7	27.3	27.5	27.3	27.2	27.2	27.0	26.7
4200.00	21.8	-28.2	-10.9	-15.6	1.2	0.8	20.2	22.9	1.7	28.1	27.2	27.5	27.5	27.5	27.2	26.9
4300.00	21.8	-28.2	-11.2	-16.0	1.3	0.8	20.2	23.1	1.7	27.1	27.9	27.5	27.7	27.6	27.3	27.0
4400.00	21.9	-28.3	-11.7	-16.6	1.3	0.8	20.2	23.2	1.7	28.1	27.3	27.4	27.6	27.5	27.2	26.9
4500.00	21.9	-28.3	-12.1	-17.3	1.3	0.8	20.0	23.4	1.7	27.1	27.4	27.3	27.4	27.2	26.9	26.6
4600.00	22.0	-28.4	-12.7	-18.0	1.3	0.8	19.4	23.3	1.6	27.2	27.2	27.0	26.9	26.8	26.5	26.2
4700.00	22.0	-28.4	-13.3	-19.0	1.3	0.8	19.6	23.1	1.6	27.2	27.1	27.1	27.1	26.9	26.7	26.4
4800.00	22.1	-28.4	-13.7	-19.5	1.3	0.8	20.0	22.8	1.7	27.7	27.8	27.3	27.4	27.3	27.1	26.9
4900.00	22.1	-28.5	-14.6	-20.1	1.3	0.8	20.0	22.8	1.7	26.9	26.4	26.6	26.5	26.3	26.1	25.8
5000.00	22.2	-28.5	-15.2	-21.4	1.3	0.8	20.2	22.8	1.7	26.2	26.7	26.4	26.3	26.2	25.9	25.6
5100.00	22.2	-28.7	-15.7	-21.8	1.3	0.8	20.4	22.7	1.7	26.3	26.5	26.7	26.5	26.4	26.2	26.0
5200.00	22.2	-28.7	-16.7	-22.5	1.3	0.8	20.4	22.7	1.7	27.0	26.9	26.7	26.8	26.7	26.7	26.7
5300.00	22.3	-28.7	-16.7	-23.0	1.3	0.8	20.4	22.8	1.7	27.0	27.1	27.0	27.0	26.9	26.8	26.8
5400.00	22.3	-28.9	-17.0	-22.4	1.3	0.8	20.0	22.9	1.7	26.0	26.3	26.2	26.2	26.1	25.9	25.7
5500.00	22.3	-28.9	-17.4	-23.5	1.3	0.8	19.5	22.8	1.7	25.8	25.8	25.9	25.8	25.5	25.3	25.0
5600.00	22.4	-29.0	-16.1	-22.7	1.3	0.8	18.9	22.5	1.8	26.6	25.7	25.7	25.5	25.4	25.0	24.6
5700.00	22.3	-29.3	-15.9	-21.5	1.4	0.8	18.7	22.3	1.8	26.0	25.9	25.7	25.6	25.4	25.0	24.6
5800.00	22.3	-29.1	-15.2	-21.9	1.3	0.8	18.6	22.0	1.8	25.4	25.4	25.2	25.1	24.9	24.5	24.2
5900.00	22.3	-29.5	-13.5	-19.7	1.4	0.9	18.6	21.8	1.8	25.4	25.4	25.2	25.2	24.9	24.6	24.3
6000.00	22.2	-29.6	-13.3	-19.4	1.4	0.9	18.3	21.2	2.0	24.9	24.5	24.7	24.5	24.2	23.8	23.5
6100.00	22.3	-29.6	-11.9	-18.4	1.4	0.9	18.4	20.9	1.8	25.3	25.0	24.9	24.7	24.5	24.2	24.1
6200.00	22.1	-30.2	-10.7	-16.4	1.4	0.9	18.4	20.4	1.9	24.8	24.7	24.5	24.3	24.1	23.9	23.8
6300.00	22.1	-30.1	-10.3	-16.0	1.4	0.9	18.2	20.1	1.9	25.0	24.8	24.7	24.6	24.4	24.2	24.2
6400.00	22.1	-30.4	-9.1	-14.5	1.											

TEST CONDITIONS: $V_{DD} = +5.0$ V, $V_{EN} = +5.0$ V, $I_{DD} = 75$ mA, $I_{EN} = 2.17$ mA @ Temperature = $+25^\circ\text{C}$

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	39.8	39.6	39.6	39.6	39.4	39.2	38.8
1000.0	38.9	38.7	38.7	38.6	38.4	38.2	37.8
2000.0	37.1	37.0	36.9	36.7	36.4	36.1	35.8
4000.0	44.6	44.5	44.2	44.0	43.7	43.5	43.3
6000.0	32.8	32.6	32.4	32.0	31.6	31.2	30.9
8000.0	36.7	36.3	35.8	35.8	36.6	38.2	40.6

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +5.0$ V, $V_{EN} = +5.0$ V, $I_{DD} = 80$ mA, $I_{EN} = 2.15$ mA @ Temperature = +25°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure (dBm)										
5500.00	21.6	-29.8	-10.0	-9.1	1.4	0.8	19.7	22.2	1.6	26.3	26.4	26.4	26.3	26.1	25.8	
5600.00	21.7	-29.9	-9.8	-9.2	1.4	0.8	19.4	22.0	1.6	25.3	25.2	25.2	25.0	24.8	24.4	
5700.00	21.7	-29.9	-10.2	-9.5	1.4	0.8	19.0	22.1	1.6	25.8	25.2	25.4	25.3	25.0	24.5	
5800.00	21.9	-30.0	-9.9	-9.5	1.4	0.8	18.7	22.2	1.6	25.3	25.4	25.3	25.2	24.9	24.5	
5900.00	21.9	-29.8	-10.3	-9.8	1.4	0.8	18.1	21.8	1.6	25.2	25.0	24.8	24.7	24.6	23.7	
6000.00	22.0	-30.0	-9.9	-9.9	1.4	0.8	18.3	21.3	1.6	23.8	23.6	23.5	23.4	23.2	22.6	
6100.00	22.0	-29.9	-10.2	-10.2	1.4	0.8	18.6	21.3	1.6	24.6	24.9	24.5	24.4	24.2	23.8	
6200.00	22.1	-30.1	-9.9	-10.2	1.4	0.8	18.8	21.1	1.6	24.2	23.9	24.1	24.0	23.8	23.7	
6300.00	22.1	-30.0	-10.2	-10.5	1.4	0.8	19.2	21.5	1.6	25.1	25.0	25.1	25.0	24.9	24.9	
6400.00	22.2	-30.4	-9.8	-10.5	1.4	0.8	19.5	21.5	1.6	25.0	24.9	25.0	25.0	25.0	25.0	
6500.00	22.2	-30.3	-10.2	-10.9	1.4	0.8	19.6	21.3	1.6	25.3	25.7	24.9	25.1	25.1	25.2	
6600.00	22.3	-30.6	-9.9	-10.9	1.4	0.8	19.5	21.0	1.6	25.4	25.1	25.1	25.2	25.2	25.3	
6700.00	22.3	-30.6	-10.3	-11.4	1.4	0.8	19.2	20.5	1.6	25.4	25.3	25.0	25.1	25.2	25.3	
6800.00	22.4	-30.9	-10.0	-11.4	1.5	0.8	19.4	20.6	1.7	25.4	25.3	25.4	25.6	25.7	25.8	
6900.00	22.4	-30.9	-10.4	-12.0	1.5	0.9	19.7	20.9	1.7	25.8	26.2	25.6	25.7	25.8	26.0	
7000.00	22.5	-31.3	-10.2	-12.0	1.5	0.9	19.7	20.8	1.7	25.4	25.1	25.2	25.2	25.4	25.8	
7100.00	22.4	-31.2	-10.7	-12.7	1.5	0.9	19.8	20.8	1.7	25.5	25.4	25.5	25.7	25.8	26.1	
7200.00	22.5	-31.5	-10.5	-12.8	1.6	0.9	20.0	20.9	1.8	25.9	25.5	25.3	25.5	25.7	26.2	
7300.00	22.4	-31.8	-11.0	-13.7	1.6	0.9	20.0	20.9	1.8	25.2	24.8	24.9	25.1	25.2	25.9	
7400.00	22.4	-32.3	-10.7	-13.8	1.7	0.9	19.8	20.8	1.9	24.9	25.2	25.0	25.2	25.3	26.0	
7500.00	22.3	-32.4	-11.2	-15.0	1.8	0.9	19.5	20.4	1.9	25.4	25.1	25.1	25.3	25.5	26.3	
7600.00	22.2	-33.1	-10.6	-15.2	1.9	1.0	19.7	20.6	2.0	24.9	25.2	25.1	25.2	25.4	26.0	
7700.00	22.0	-33.4	-10.9	-16.8	2.0	1.0	19.7	20.5	2.1	23.8	23.8	24.0	24.2	24.4	25.0	
7800.00	21.8	-34.3	-9.9	-16.7	2.2	1.0	19.4	20.2	2.2	24.7	24.5	24.7	24.9	25.1	25.9	
7900.00	21.4	-34.5	-9.9	-18.5	2.3	1.0	19.1	19.8	2.3	24.6	24.5	24.7	24.8	25.1	26.0	
8000.00	21.0	-36.0	-8.5	-17.2	2.7	1.1	18.5	19.1	2.4	24.1	24.0	24.2	24.3	24.7	25.9	
8100.00	20.6	-36.2	-8.3	-17.6	2.8	1.1	18.7	19.3	2.5	24.3	24.0	24.2	24.4	24.5	25.7	
8200.00	19.8	-38.3	-6.8	-14.9	3.5	1.2	18.8	19.2	2.7	23.5	23.4	23.5	23.9	24.4	25.3	
8300.00	19.3	-38.2	-6.5	-14.0	3.6	1.2	18.7	19.1	2.8	23.6	23.8	23.6	23.8	24.1	24.6	
8400.00	18.1	-41.0	-5.3	-11.4	4.8	1.2	18.4	18.9	3.0	24.0	23.8	23.9	24.0	24.2	24.8	
8500.00	17.5	-40.9	-4.8	-10.4	4.8	1.2	17.9	18.4	3.2	22.8	22.7	22.7	23.0	23.5	24.6	

FREQ (MHz)	IP-2 Output Pout = -2	IP-2 Output Pout = +0	IP-2 Output Pout = +2	IP-2 Output Pout = +4	IP-2 Output Pout = +6	IP-2 Output Pout = +8	IP-2 Output Pout = +10
	(dBm)						
5500.0	36.9	36.9	36.7	36.5	36.2	35.9	35.6
6000.0	33.8	33.7	33.5	33.2	32.8	32.4	32.0
7000.0	44.0	43.8	43.6	43.3	43.0	42.7	42.6
8000.0	52.0	51.9	51.6	51.2	50.9	50.6	50.6
8500.0	60.2	60.0	59.7	59.3	59.0	58.9	59.4

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions**Definitions:**

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +5.0$ V, $V_{EN} = 0$ V, $I_{DD} = 3$ mA, $I_{EN} = 0$ mA @ Temperature = $+25^\circ\text{C}$

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)
					K	Measure	
200.00	-3.7	-3.8	-4.0	-8.7	1.1	0.8	3.2
300.00	-2.3	-2.4	-6.7	-11.5	1.0	0.7	2.0
400.00	-1.7	-1.8	-9.3	-13.7	1.0	0.5	1.6
500.00	-1.4	-1.4	-12.0	-15.6	1.0	0.5	1.4
600.00	-1.2	-1.3	-14.9	-17.0	1.0	0.4	1.2
700.00	-1.2	-1.2	-18.2	-18.0	1.0	0.4	1.2
800.00	-1.1	-1.2	-22.2	-18.3	1.0	0.4	1.3
900.00	-1.1	-1.2	-27.8	-18.1	1.0	0.4	1.3
1000.00	-1.1	-1.2	-32.8	-17.7	1.0	0.4	1.2
1100.00	-1.1	-1.2	-27.4	-17.3	1.0	0.4	1.1
1200.00	-1.1	-1.2	-23.4	-17.0	1.0	0.4	1.1
1300.00	-1.1	-1.2	-20.8	-16.6	1.0	0.4	1.1
1400.00	-1.1	-1.3	-18.9	-16.1	1.0	0.4	1.1
1500.00	-1.2	-1.3	-17.5	-15.7	1.0	0.4	1.5
1600.00	-1.2	-1.3	-16.4	-15.5	1.0	0.4	1.1
1700.00	-1.3	-1.4	-15.6	-15.5	1.0	0.5	1.3
1800.00	-1.3	-1.4	-14.9	-15.4	1.0	0.5	1.5
1900.00	-1.3	-1.5	-14.4	-15.2	1.0	0.5	1.6
2000.00	-1.4	-1.5	-13.9	-15.1	1.0	0.5	1.4
2100.00	-1.4	-1.6	-13.7	-15.3	1.0	0.5	1.2
2200.00	-1.4	-1.6	-13.5	-15.6	1.0	0.5	1.5
2300.00	-1.4	-1.6	-13.4	-15.8	1.0	0.5	1.8
2400.00	-1.5	-1.7	-13.3	-16.1	1.0	0.5	1.8
2500.00	-1.5	-1.7	-13.3	-16.6	1.0	0.6	1.8
2600.00	-1.5	-1.8	-13.4	-17.3	1.0	0.6	1.8
2700.00	-1.5	-1.9	-13.5	-18.1	1.1	0.6	1.9
2800.00	-1.5	-1.9	-13.6	-18.9	1.1	0.6	2.1
2900.00	-1.5	-2.0	-13.8	-19.8	1.1	0.6	2.0
3000.00	-1.6	-2.0	-14.0	-21.0	1.1	0.6	2.1
3100.00	-1.6	-1.9	-14.1	-22.6	1.1	0.6	2.0
3200.00	-1.6	-1.9	-14.2	-24.6	1.1	0.6	2.0
3300.00	-1.6	-1.9	-14.2	-26.6	1.1	0.6	1.9
3400.00	-1.6	-1.9	-14.3	-29.0	1.1	0.6	2.0
3500.00	-1.6	-1.9	-14.3	-30.3	1.1	0.6	2.0
3600.00	-1.6	-1.9	-14.2	-27.9	1.1	0.6	2.0
3700.00	-1.6	-1.9	-14.1	-24.9	1.1	0.6	2.0
3800.00	-1.7	-1.9	-13.9	-22.6	1.1	0.6	2.1
3900.00	-1.7	-2.0	-13.7	-20.9	1.1	0.6	2.1
4000.00	-1.7	-2.0	-13.5	-19.2	1.1	0.6	2.4
4100.00	-1.7	-2.0	-13.2	-17.7	1.1	0.6	2.0
4200.00	-1.7	-2.0	-12.8	-16.6	1.1	0.6	2.2
4300.00	-1.7	-2.1	-12.6	-15.8	1.1	0.6	2.5
4400.00	-1.8	-2.1	-12.3	-15.0	1.1	0.6	2.1
4500.00	-1.8	-2.1	-12.0	-14.3	1.1	0.6	2.1
4600.00	-1.8	-2.2	-11.7	-13.6	1.1	0.6	1.3
4700.00	-1.8	-2.2	-11.5	-13.2	1.1	0.6	2.2
4800.00	-1.8	-2.2	-11.4	-12.9	1.1	0.6	2.0
4900.00	-1.9	-2.3	-11.3	-12.5	1.1	0.6	1.8
5000.00	-1.9	-2.3	-11.1	-12.1	1.1	0.6	2.2
5100.00	-1.9	-2.3	-11.0	-11.9	1.1	0.6	2.0
5200.00	-1.9	-2.3	-10.9	-11.7	1.1	0.6	2.5
5300.00	-1.9	-2.3	-10.9	-11.6	1.1	0.6	2.0
5400.00	-1.9	-2.4	-10.9	-11.5	1.1	0.6	1.7
5500.00	-1.9	-2.4	-10.9	-11.3	1.1	0.6	2.3
5600.00	-1.8	-2.3	-11.1	-11.4	1.1	0.6	2.5
5700.00	-1.8	-2.4	-11.1	-11.4	1.1	0.6	2.2
5800.00	-1.8	-2.3	-11.2	-11.4	1.1	0.6	2.4
5900.00	-1.8	-2.3	-11.6	-11.6	1.1	0.6	2.7
6000.00	-1.8	-2.3	-11.7	-11.5	1.1	0.6	2.8
6100.00	-1.7	-2.3	-12.0	-11.7	1.1	0.6	2.0
6200.00	-1.7	-2.3	-12.4	-12.0	1.1	0.6	2.0
6300.00	-1.7	-2.3	-12.6	-12.1	1.1	0.6	2.3
6400.00	-1.6	-2.3	-13.0	-12.3	1.1	0.6	2.1
6500.00	-1.7	-2.3	-13.2	-12.4	1.1	0.6	1.7
6600.00	-1.6	-2.2	-13.4	-12.4	1.1	0.6	1.7
6700.00	-1.6	-2.2	-13.9	-12.8	1.1	0.6	2.1
6800.00	-1.6	-2.3	-14.0	-12.8	1.1	0.6	1.9
6900.00	-1.6	-2.2	-14.1	-12.8	1.1	0.6	2.0
7000.00	-1.6	-2.3	-14.3	-12.9	1.1	0.6	2.5
7100.00	-1.7	-2.3	-14.1	-12.8	1.1	0.6	2.4
7200.00	-1.7	-2.3	-14.0	-12.8	1.1	0.6	2.3
7300.00	-1.7	-2.4	-13.8	-12.6	1.1	0.6	2.8
7400.00	-1.8	-2.5	-13.3	-12.2	1.1	0.6	2.6
7500.00	-1.8	-2.5	-12.8	-12.0	1.1	0.6	2.2
7600.00	-2.0	-2.6	-12.5	-11.7	1.1	0.6	2.4
7700.00	-2.0	-2.7	-11.7	-11.1	1.1	0.6	2.6
7800.00	-2.1	-2.8	-11.3	-10.7	1.1	0.6	2.1
7900.00	-2.3	-3.0	-10.7	-10.1	1.2	0.6	2.6
8000.00	-2.4	-3.0	-9.8	-9.5	1.1	0.6	2.3

TEST CONDITIONS: $V_{DD} = +5.0$ V, $V_{EN} = 0$ V, $I_{DD} = 3$ mA, $I_{EN} = 0$ mA @ Temperature = +25°C

FREQ (MHz)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
400.0	40.6	39.2	36.3	31.9	26.7	20.0	16.8
1000.0	42.4	41.3	37.9	33.0	26.7	18.1	15.5
2000.0	44.1	43.3	41.9	38.6	33.7	26.7	18.6
4000.0	40.7	41.8	42.9	42.5	40.4	36.3	30.1
6000.0	41.4	43.4	44.7	43.6	40.1	34.1	25.7
8000.0	41.7	43.4	43.9	43.8	40.6	35.1	26.8

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	71.7	71.5	71.1	70.3	67.6	58.8	47.2
1000.0	71.0	71.2	71.4	71.6	69.5	55.2	60.6
2000.0	70.6	70.6	70.5	70.6	70.1	67.0	55.3
4000.0	74.6	74.6	74.6	74.6	74.8	75.1	74.8
6000.0	73.6	73.6	73.4	73.2	72.9	72.0	67.6
8000.0	84.4	84.4	84.4	84.4	84.2	83.5	80.6

FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
400.0	14.4	11.2
1000.0	13.1	10.8
2000.0	15.1	12.4
4000.0	17.5	13.9
6000.0	18.2	14.6
8000.0	18.2	13.5



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IF/RF MICROWAVE COMPONENTS



Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +5.0 V, V_{EN} = 0 V, I_{DD} = 3 mA, I_{EN} = 0 mA @ Temperature = +25°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)	FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
					K	Measure				
5500.00	-1.6	-2.2	-20.4	-18.0	1.1	0.7	2.2	5500.0	17.2	14.0
5600.00	-1.6	-2.2	-21.0	-17.9	1.1	0.6	2.3	6000.0	19.0	15.0
5700.00	-1.6	-2.3	-20.8	-17.7	1.1	0.6	2.3	7000.0	20.4	16.0
5800.00	-1.6	-2.3	-20.2	-17.0	1.1	0.6	2.2	8000.0	20.7	14.6
5900.00	-1.6	-2.3	-19.2	-16.4	1.1	0.6	2.1	8500.0	19.4	12.9
6000.00	-1.6	-2.3	-18.4	-15.7	1.1	0.6	2.1			
6100.00	-1.6	-2.3	-17.2	-14.9	1.1	0.6	2.0			
6200.00	-1.6	-2.4	-16.3	-14.3	1.1	0.6	2.3			
6300.00	-1.6	-2.4	-15.3	-13.5	1.1	0.6	2.5			
6400.00	-1.7	-2.4	-14.5	-12.9	1.1	0.6	2.0			
6500.00	-1.7	-2.5	-13.6	-12.3	1.1	0.6	2.0			
6600.00	-1.8	-2.5	-13.0	-11.8	1.1	0.6	2.5			
6700.00	-1.8	-2.6	-12.1	-11.1	1.1	0.6	2.5			
6800.00	-1.9	-2.7	-11.5	-10.7	1.1	0.6	2.4			
6900.00	-2.0	-2.8	-10.8	-10.1	1.1	0.6	2.8			
7000.00	-2.1	-2.9	-10.2	-9.6	1.1	0.6	2.4			
7100.00	-2.2	-3.0	-9.6	-9.1	1.1	0.6	2.0			
7200.00	-2.3	-3.1	-9.1	-8.7	1.1	0.6	2.7			
7300.00	-2.4	-3.2	-8.5	-8.2	1.1	0.6	2.1			
7400.00	-2.5	-3.3	-8.0	-7.8	1.1	0.6	2.4			
7500.00	-2.7	-3.5	-7.5	-7.3	1.1	0.6	2.4			
7600.00	-2.9	-3.6	-7.0	-7.0	1.1	0.6	2.4			
7700.00	-3.1	-3.8	-6.6	-6.5	1.1	0.6	2.6			
7800.00	-3.2	-4.0	-6.2	-6.2	1.1	0.6	2.2			
7900.00	-3.4	-4.2	-5.8	-5.8	1.1	0.6	3.3			
8000.00	-3.6	-4.3	-5.5	-5.6	1.2	0.6	2.8			
8100.00	-3.8	-4.5	-5.1	-5.2	1.2	0.6	3.8			
8200.00	-4.0	-4.7	-4.8	-5.0	1.2	0.6	3.1			
8300.00	-4.2	-4.9	-4.5	-4.7	1.2	0.6	3.0			
8400.00	-4.4	-5.1	-4.3	-4.6	1.2	0.6	2.8			
8500.00	-4.6	-5.3	-4.0	-4.2	1.2	0.6	3.2			

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
5500.0	70.2	70.1	69.9	69.7	69.4	68.4	64.6	41.3	42.1	42.5	41.8	41.2	38.3	32.5
6000.0	76.7	76.7	76.6	76.5	76.2	75.9	74.9	40.5	40.7	41.6	42.0	40.7	36.6	29.1
7000.0	88.9	88.7	88.6	88.4	88.1	87.7	86.8	40.6	41.7	41.0	42.2	40.2	36.0	30.1
8000.0	84.7	84.7	84.6	84.6	84.4	84.1	83.2	40.8	41.7	42.0	41.4	40.8	39.1	34.2
8500.0	92.0	91.9	91.8	91.7	91.6	93.7	90.4	42.0	43.3	44.5	42.6	37.5	29.9	18.7



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +5.25 V, V_{EN} = +5.25 V, I_{DD} = 81 mA, I_{EN} = 2.28 mA @ Temperature = +25°C

FREQ (GHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure										
200.00	15.1	-33.3	-1.9	-4.5	1.4	0.9	20.3	21.7	4.6	31.3	32.7	32.0	32.5	32.2	32.0	31.8
300.00	19.9	-28.3	-5.8	-8.7	1.2	0.8	20.5	21.8	2.5	31.8	32.0	31.9	32.4	32.1	31.8	31.6
400.00	21.4	-26.9	-12.0	-14.7	1.2	0.7	21.1	22.2	1.8	30.9	33.0	33.6	33.8	33.4	33.1	33.1
500.00	21.8	-26.6	-17.9	-17.5	1.1	0.7	21.4	22.3	1.6	32.1	34.4	33.9	33.9	34.2	33.7	33.6
600.00	21.8	-26.5	-18.4	-16.5	1.1	0.6	21.6	22.4	1.5	33.9	35.0	35.3	35.2	34.7	34.4	34.4
700.00	21.8	-26.5	-16.8	-15.5	1.1	0.6	21.8	22.6	1.4	31.9	33.6	33.8	34.4	33.8	33.4	33.2
800.00	21.8	-26.5	-15.7	-15.1	1.1	0.6	21.8	22.7	1.4	32.6	33.3	35.5	34.4	34.3	34.3	34.1
900.00	21.8	-26.6	-15.2	-15.0	1.1	0.6	21.9	22.8	1.4	35.3	33.6	34.5	34.5	34.4	34.1	33.9
1000.00	21.8	-26.6	-14.9	-15.2	1.1	0.6	21.9	22.8	1.4	33.8	33.8	33.7	34.0	34.4	33.9	33.9
1100.00	21.8	-26.7	-14.9	-15.6	1.1	0.7	21.8	22.7	1.4	33.1	34.3	34.1	34.3	34.2	33.8	33.7
1200.00	21.8	-26.7	-15.0	-16.2	1.1	0.7	22.0	22.9	1.4	34.1	33.3	33.3	33.5	33.4	33.3	33.3
1300.00	21.9	-26.7	-15.2	-16.9	1.1	0.7	22.0	22.9	1.4	33.0	32.1	33.3	33.1	33.2	33.1	32.9
1400.00	21.9	-26.8	-15.4	-17.9	1.1	0.7	21.9	22.8	1.4	33.7	32.9	33.1	33.2	33.1	33.0	33.0
1500.00	21.9	-26.8	-15.7	-19.2	1.1	0.7	21.9	23.0	1.4	31.6	32.2	32.0	32.5	32.4	32.2	32.1
1600.00	21.9	-26.8	-15.8	-20.8	1.2	0.7	21.9	22.9	1.4	32.7	32.7	32.6	32.4	32.2	32.3	32.1
1700.00	21.9	-26.9	-15.7	-22.3	1.2	0.7	22.1	23.1	1.5	33.3	33.9	32.6	32.4	32.3	32.3	32.1
1800.00	21.9	-26.9	-15.7	-24.8	1.2	0.7	21.7	23.0	1.5	31.6	31.4	31.6	32.2	32.1	32.1	31.9
1900.00	21.9	-27.0	-15.6	-27.7	1.2	0.7	21.7	23.0	1.5	30.9	31.9	31.4	31.8	31.5	31.4	31.4
2000.00	21.9	-27.0	-15.4	-29.9	1.2	0.7	21.6	22.9	1.5	33.7	31.5	32.1	32.0	31.9	31.8	31.8
2100.00	21.9	-27.1	-14.9	-29.0	1.2	0.7	21.7	23.1	1.5	30.8	33.3	31.8	31.7	31.8	31.6	31.6
2200.00	21.9	-27.1	-14.5	-26.4	1.2	0.7	21.6	23.0	1.6	30.5	31.6	31.5	31.6	31.6	31.5	31.4
2300.00	21.9	-27.3	-14.0	-23.8	1.2	0.7	21.5	23.1	1.6	31.5	31.4	31.5	31.7	31.6	31.6	31.4
2400.00	21.9	-27.3	-13.5	-21.7	1.2	0.8	21.4	23.3	1.6	30.1	29.9	30.0	29.9	29.8	29.7	29.5
2500.00	21.9	-27.4	-13.1	-20.2	1.2	0.8	21.2	23.3	1.7	29.4	30.1	29.7	29.8	29.9	29.6	29.4
2600.00	21.9	-27.5	-12.7	-18.9	1.2	0.8	21.0	23.4	1.7	29.6	29.7	29.9	30.0	29.8	29.6	29.4
2700.00	21.8	-27.7	-12.3	-18.0	1.2	0.8	20.5	22.9	1.8	31.4	31.2	30.2	30.1	29.9	29.7	29.5
2800.00	21.8	-27.8	-12.0	-17.1	1.2	0.8	20.4	22.7	1.8	28.9	29.7	29.6	29.5	29.3	29.2	28.9
2900.00	21.8	-27.9	-11.5	-16.1	1.2	0.8	20.1	22.5	1.8	29.4	29.9	29.8	29.7	29.5	29.3	29.1
3000.00	21.7	-27.9	-11.2	-15.4	1.2	0.8	20.3	22.8	1.8	28.1	28.7	28.3	28.4	28.3	28.1	27.7
3100.00	21.7	-27.9	-10.8	-14.9	1.2	0.8	20.2	23.1	1.8	28.0	28.2	28.2	28.4	28.3	28.0	27.7
3200.00	21.7	-28.0	-10.6	-14.5	1.2	0.8	20.2	23.0	1.8	28.8	29.7	28.9	28.8	28.7	28.5	28.5
3300.00	21.7	-28.0	-10.4	-14.3	1.2	0.8	20.2	22.9	1.7	29.2	28.9	28.6	28.6	28.4	28.2	28.0
3400.00	21.7	-28.1	-10.3	-14.1	1.2	0.8	20.0	22.8	1.8	29.7	29.3	28.9	28.8	28.7	28.5	28.5
3500.00	21.7	-28.1	-10.2	-14.1	1.2	0.8	20.0	22.9	1.8	28.3	28.6	28.5	28.4	28.4	28.1	27.9
3600.00	21.8	-28.2	-10.3	-14.2	1.2	0.8	20.0	22.9	1.7	27.9	27.8	28.5	28.6	28.2	28.0	28.0
3700.00	21.8	-28.2	-10.2	-14.3	1.2	0.8	20.2	23.0	1.7	29.1	29.3	29.3	29.4	29.4	29.3	29.2
3800.00	21.8	-28.2	-10.4	-14.5	1.2	0.8	20.6	23.1	1.7	28.7	29.3	28.9	28.9	28.8	28.7	28.7
3900.00	21.8	-28.2	-10.5	-14.8	1.2	0.8	20.8	23.1	1.7	28.3	28.4	29.0	28.8	28.6	28.5	28.4
4000.00	21.9	-28.3	-10.7	-15.1	1.2	0.8	20.9	23.3	1.7	29.8	28.8	29.0	28.7	28.8	28.5	28.5
4100.00	21.9	-28.4	-11.0	-15.7	1.2	0.8	20.9	23.4	1.7	28.9	28.0	28.1	28.3	28.1	28.0	27.8
4200.00	22.0	-28.4	-11.2	-16.3	1.2	0.8	21.0	23.3	1.7	27.9	28.0	28.3	28.1	28.4	28.2	28.0
4300.00	22.0	-28.4	-11.5	-16.7	1.3	0.8	21.0	23.4	1.7	27.8	28.5	28.7	28.6	28.4	28.2	28.2
4400.00	22.1	-28.3	-12.0	-17.4	1.3	0.8	21.0	23.5	1.7	29.1	29.1	27.7	28.7	28.4	28.3	28.1
4500.00	22.1	-28.4	-12.4	-18.1	1.3	0.8	20.8	23.6	1.7	28.1	28.1	28.0	28.2	28.1	27.9	27.7
4600.00	22.2	-28.6	-13.0	-18.9	1.3	0.8	20.4	23.6	1.7	27.3	28.2	28.1	27.9	27.9	27.6	27.4
4700.00	22.2	-28.5	-13.6	-20.1	1.3	0.8	20.6	23.4	1.6	27.7	28.6	27.9	28.0	27.9	27.8	27.6
4800.00	22.3	-28.6	-14.0	-20.6	1.3	0.8	20.7	23.2	1.7	28.0	28.3	28.2	28.2	28.1	28.0	27.8
4900.00	22.3	-28.7	-15.0	-21.4	1.3	0.8	20.6	23.1	1.7	27.3	27.2	27.6	27.2	27.3	27.1	26.9
5000.00	22.4	-28.7	-15.6	-22.9	1.3	0.8	20.7	23.1	1.7	26.9	26.8	27.1	27.1	27.0	26.9	26.7
5100.00	22.4	-28.8	-16.1	-23.2	1.3	0.8	20.9	23.0	1.6	27.2	27.2	27.2	27.1	27.1	27.1	27.1
5200.00	22.4	-28.8	-17.3	-24.2	1.3	0.8	20.9	22.9	1.7	27.7	27.5	27.5	27.5	27.6	27.6	27.6
5300.00	22.5	-28.9	-17.3	-24.8	1.3	0.8	20.9	23.1	1.7	27.6	27.4	27.6	27.7	27.8	27.8	27.8
5400.00	22.5	-29.1	-17.7	-24.1	1.3	0.8	20.7	23.2	1.7	27.2	26.9	26.9	27.0	27.0	26.9	26.8
5500.00	22.5	-29.0	-18.2	-25.6	1.3	0.8	20.2	23.1	1.7	26.0	26.7	26.6	26.5	26.5	26.4	26.2
5600.00	22.6	-29.1	-16.8	-24.4	1.3	0.8	19.6	22.7	1.7	26.2	26.6	26.5	26.5	26.3	26.1	25.8
5700.00	22.5	-29.4	-16.5	-23.0	1.4	0.8	19.4	22.5	1.7	26.9	26.5	26.5	26.4	26.4	26.1	25.8
5800.00	22.6	-29.2	-15.8	-23.4	1.3	0.8	19.3	22.2	1.8	26.0	26.2	26.2	26.0	25.9	25.6	25.4
5900.00	22.6	-29.6	-14.0	-20.8	1.4	0.8	19.2	22.0	1.8	25.9	26.0	26.1	26.0	25.9	25.6	25.4
6000.00	22.4	-29.6	-13.8	-20.4	1.4	0.9	18.9	21.3	2.0	25.9	25.3	25.4	25.3	25.1	24.9	24.5
6100.00	22.5	-29.6	-12.3	-19.3	1.4	0.9	18.9	21.0	1.8	25.8	25.7	25.5	25.4	25.3	25.1	25.0
6200.00	22.4	-30.1	-11.0	-17.0	1.4	0.9	18.9	20.6	1.9	25.0	25.2	25.1	25.0	24.9	24.8	24.7
6300.00	22.3	-30.0	-10.6	-16.6	1.4	0.9	18.7	20.4	1.9	25.2	25.5	25.4	25.2	25.2	25.1	25.2
6400.00	22.3	-30.4	-9.3	-14.9	1.4	0.9	18.7	20.2	1.9							

TEST CONDITIONS: $V_{DD} = +5.25$ V, $V_{EN} = +5.25$ V, $I_{DD} = 81$ mA, $I_{EN} = 2.28$ mA @ Temperature = $+25^\circ\text{C}$

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	41.5	41.4	41.4	41.3	41.2	41.0	40.6
1000.0	40.7	40.5	40.5	40.3	40.2	39.9	39.5
2000.0	38.8	38.5	38.5	38.3	38.1	37.8	37.5
4000.0	44.8	44.7	44.5	44.3	44.0	43.8	43.7
6000.0	33.4	33.2	33.0	32.7	32.3	31.9	31.6
8000.0	37.5	37.0	36.6	36.5	37.1	38.5	40.7

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +5.25 V, V_{EN} = +5.25 V, I_{DD} = 87 mA, I_{EN} = 2.26 mA @ Temperature = +25°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure (dBm)										
5500.00	21.8	-29.8	-10.1	-9.4	1.4	0.8	19.7	22.7	1.6	26.4	27.2	27.0	27.1	27.1	26.9	
5600.00	21.9	-29.9	-9.9	-9.5	1.4	0.8	19.7	22.6	1.6	25.9	25.4	26.0	26.1	26.0	25.6	
5700.00	21.9	-30.0	-10.3	-9.7	1.4	0.8	19.1	22.6	1.6	26.0	26.2	26.2	26.2	26.0	25.8	
5800.00	22.1	-29.9	-10.0	-9.8	1.4	0.8	19.1	22.6	1.6	26.0	26.6	26.1	26.2	26.1	25.7	
5900.00	22.1	-30.0	-10.4	-10.1	1.4	0.8	18.6	21.9	1.6	25.7	25.9	25.6	25.5	25.3	24.9	
6000.00	22.2	-30.1	-10.0	-10.0	1.4	0.8	18.6	21.4	1.6	24.4	24.1	24.2	24.3	24.1	23.8	
6100.00	22.2	-30.0	-10.4	-10.4	1.4	0.8	18.9	21.5	1.6	25.7	25.5	25.1	25.1	25.0	24.8	
6200.00	22.3	-30.2	-10.0	-10.3	1.4	0.8	19.0	21.3	1.6	24.9	24.6	24.7	24.7	24.6	24.6	
6300.00	22.3	-30.1	-10.4	-10.7	1.4	0.8	19.2	21.7	1.6	26.0	25.6	25.6	25.7	25.7	25.8	
6400.00	22.4	-30.4	-10.0	-10.6	1.4	0.8	19.7	21.8	1.6	25.6	25.2	25.5	25.6	25.6	25.9	
6500.00	22.4	-30.4	-10.3	-11.0	1.4	0.8	19.7	21.7	1.6	25.9	25.6	25.6	25.6	25.7	25.9	
6600.00	22.5	-30.7	-10.0	-11.0	1.4	0.8	19.4	21.3	1.6	25.8	25.3	25.6	25.7	25.8	25.9	
6700.00	22.5	-30.8	-10.5	-11.5	1.5	0.8	19.3	20.9	1.6	25.2	25.6	25.6	25.6	25.9	26.2	
6800.00	22.6	-31.0	-10.2	-11.4	1.5	0.8	19.5	21.1	1.7	26.0	25.6	25.8	26.0	26.1	26.3	
6900.00	22.6	-30.9	-10.6	-12.0	1.5	0.8	19.9	21.4	1.7	26.1	25.6	26.1	26.1	26.3	26.9	
7000.00	22.6	-31.4	-10.4	-12.0	1.5	0.9	19.9	21.3	1.7	25.6	25.6	25.4	25.6	25.9	26.5	
7100.00	22.6	-31.4	-10.9	-12.7	1.5	0.9	19.7	21.2	1.7	25.9	25.9	25.9	25.9	26.2	26.8	
7200.00	22.6	-31.8	-10.6	-12.8	1.6	0.9	20.1	21.3	1.8	26.0	25.5	25.7	25.9	26.1	26.8	
7300.00	22.5	-31.9	-11.2	-13.6	1.6	0.9	20.2	21.3	1.8	25.4	25.4	25.3	25.4	25.7	26.5	
7400.00	22.6	-32.4	-10.9	-13.8	1.7	0.9	20.0	21.2	1.9	25.5	25.4	25.3	25.6	25.8	26.1	
7500.00	22.4	-32.6	-11.4	-14.9	1.8	0.9	19.6	20.9	2.0	25.4	24.9	25.4	25.6	25.9	26.8	
7600.00	22.4	-33.4	-10.7	-15.0	1.9	1.0	19.9	21.0	2.0	24.9	25.6	25.4	25.5	25.8	26.1	
7700.00	22.1	-33.5	-11.1	-16.7	2.0	1.0	19.8	20.8	2.1	24.0	23.9	24.0	24.3	24.6	25.6	
7800.00	21.9	-34.5	-10.0	-16.7	2.2	1.0	19.6	20.6	2.2	25.3	25.0	25.0	25.2	25.4	26.4	
7900.00	21.6	-34.9	-10.0	-18.7	2.4	1.0	19.3	20.3	2.3	25.0	24.8	25.0	25.1	25.4	26.5	
8000.00	21.2	-36.2	-8.6	-17.4	2.7	1.1	18.5	19.7	2.4	24.2	23.9	24.4	24.6	24.9	25.5	
8100.00	20.7	-36.4	-8.3	-17.9	2.8	1.1	18.8	19.7	2.5	24.2	24.0	24.4	24.5	24.9	26.2	
8200.00	19.9	-38.7	-6.8	-15.1	3.6	1.2	18.8	19.6	2.7	23.2	23.7	23.8	24.2	24.9	25.9	
8300.00	19.4	-38.5	-6.5	-14.3	3.6	1.2	18.8	19.5	2.8	23.4	23.7	23.9	24.0	24.5	25.1	
8400.00	18.2	-41.3	-5.3	-11.5	5.0	1.2	18.6	19.1	3.0	23.9	23.6	24.1	24.3	24.7	25.4	
8500.00	17.6	-41.4	-4.9	-10.6	5.1	1.2	18.1	18.6	3.2	22.7	22.5	22.8	23.1	23.8	24.8	

FREQ (MHz)	IP-2 Output Pout = -2	IP-2 Output Pout = +0	IP-2 Output Pout = +2	IP-2 Output Pout = +4	IP-2 Output Pout = +6	IP-2 Output Pout = +8	IP-2 Output Pout = +10
	(dBm)						
5500.0	37.6	37.5	37.4	37.2	36.9	36.7	36.5
6000.0	34.3	34.2	34.0	33.7	33.3	33.0	32.6
7000.0	44.1	44.0	43.8	43.5	43.2	43.0	42.9
8000.0	52.2	52.0	51.8	51.5	51.2	50.9	50.9
8500.0	60.5	60.2	59.9	59.6	59.3	59.2	59.6

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions**Definitions:**

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +5.25$ V, $V_{EN} = 0$ V, $I_{DD} = 3$ mA, $I_{EN} = 0$ mA @ Temperature = $+25^\circ\text{C}$

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)
					K	Measure	
200.00	-3.7	-3.8	-4.0	-8.8	1.1	0.9	3.3
300.00	-2.3	-2.4	-6.6	-11.6	1.0	0.7	2.0
400.00	-1.7	-1.8	-9.3	-13.8	1.0	0.5	1.5
500.00	-1.4	-1.5	-12.0	-15.6	1.0	0.5	1.4
600.00	-1.3	-1.3	-14.9	-17.0	1.0	0.4	1.3
700.00	-1.2	-1.3	-18.1	-18.0	1.0	0.4	1.2
800.00	-1.2	-1.2	-22.2	-18.2	1.0	0.4	1.3
900.00	-1.1	-1.2	-27.6	-18.0	1.0	0.4	1.2
1000.00	-1.1	-1.2	-32.4	-17.6	1.0	0.4	1.1
1100.00	-1.1	-1.2	-27.4	-17.3	1.0	0.4	1.2
1200.00	-1.1	-1.2	-23.3	-17.0	1.0	0.4	1.1
1300.00	-1.1	-1.2	-20.8	-16.5	1.0	0.4	1.3
1400.00	-1.2	-1.3	-18.9	-16.0	1.0	0.4	1.1
1500.00	-1.2	-1.3	-17.5	-15.6	1.0	0.4	1.2
1600.00	-1.2	-1.4	-16.4	-15.5	1.0	0.4	1.4
1700.00	-1.3	-1.4	-15.5	-15.4	1.0	0.5	1.2
1800.00	-1.3	-1.4	-14.9	-15.4	1.0	0.5	1.5
1900.00	-1.3	-1.5	-14.4	-15.2	1.0	0.5	1.3
2000.00	-1.4	-1.5	-13.9	-15.1	1.0	0.5	1.8
2100.00	-1.4	-1.6	-13.7	-15.3	1.0	0.5	1.5
2200.00	-1.4	-1.6	-13.5	-15.5	1.0	0.5	1.5
2300.00	-1.4	-1.6	-13.3	-15.8	1.0	0.5	1.7
2400.00	-1.5	-1.7	-13.3	-16.1	1.0	0.5	1.8
2500.00	-1.5	-1.8	-13.2	-16.6	1.0	0.6	1.8
2600.00	-1.5	-1.8	-13.3	-17.3	1.1	0.6	1.8
2700.00	-1.5	-1.9	-13.4	-18.1	1.1	0.6	1.9
2800.00	-1.5	-1.9	-13.6	-18.9	1.1	0.6	1.7
2900.00	-1.6	-2.0	-13.8	-19.8	1.1	0.6	2.2
3000.00	-1.6	-2.0	-13.9	-20.9	1.1	0.6	2.1
3100.00	-1.6	-2.0	-14.0	-22.5	1.1	0.6	1.7
3200.00	-1.6	-2.0	-14.1	-24.5	1.1	0.6	1.6
3300.00	-1.6	-1.9	-14.2	-26.4	1.1	0.6	2.0
3400.00	-1.6	-1.9	-14.2	-28.7	1.1	0.6	2.1
3500.00	-1.6	-1.9	-14.2	-29.9	1.1	0.6	1.9
3600.00	-1.6	-1.9	-14.2	-27.6	1.1	0.6	2.1
3700.00	-1.6	-1.9	-14.1	-24.8	1.1	0.6	2.2
3800.00	-1.7	-2.0	-13.9	-22.6	1.1	0.6	2.0
3900.00	-1.7	-2.0	-13.7	-20.8	1.1	0.6	1.8
4000.00	-1.7	-2.0	-13.4	-19.2	1.1	0.6	2.0
4100.00	-1.7	-2.0	-13.1	-17.7	1.1	0.6	2.0
4200.00	-1.7	-2.0	-12.8	-16.6	1.1	0.6	2.3
4300.00	-1.8	-2.1	-12.5	-15.8	1.1	0.6	2.0
4400.00	-1.8	-2.1	-12.2	-15.0	1.1	0.6	1.8
4500.00	-1.8	-2.1	-12.0	-14.3	1.1	0.6	1.8
4600.00	-1.8	-2.2	-11.7	-13.6	1.1	0.6	2.0
4700.00	-1.8	-2.2	-11.5	-13.1	1.1	0.6	2.2
4800.00	-1.9	-2.2	-11.4	-12.9	1.1	0.6	2.0
4900.00	-1.9	-2.3	-11.3	-12.5	1.1	0.6	2.3
5000.00	-1.9	-2.3	-11.1	-12.1	1.1	0.6	2.2
5100.00	-1.9	-2.3	-11.0	-11.9	1.1	0.6	1.8
5200.00	-1.9	-2.3	-10.9	-11.7	1.1	0.6	1.2
5300.00	-1.9	-2.3	-10.9	-11.6	1.1	0.6	2.0
5400.00	-1.9	-2.4	-10.9	-11.5	1.1	0.6	2.0
5500.00	-1.9	-2.4	-10.9	-11.3	1.1	0.6	2.3
5600.00	-1.8	-2.4	-11.1	-11.4	1.1	0.6	2.6
5700.00	-1.8	-2.4	-11.1	-11.4	1.1	0.6	2.2
5800.00	-1.8	-2.3	-11.2	-11.4	1.1	0.6	2.2
5900.00	-1.8	-2.3	-11.6	-11.6	1.1	0.6	2.2
6000.00	-1.8	-2.3	-11.7	-11.5	1.1	0.6	2.4
6100.00	-1.7	-2.3	-12.0	-11.7	1.1	0.6	1.7
6200.00	-1.7	-2.3	-12.4	-12.0	1.1	0.6	2.9
6300.00	-1.7	-2.3	-12.6	-12.0	1.1	0.6	2.2
6400.00	-1.6	-2.3	-13.0	-12.3	1.1	0.6	2.6
6500.00	-1.7	-2.3	-13.2	-12.4	1.1	0.6	1.9
6600.00	-1.6	-2.2	-13.4	-12.4	1.1	0.6	2.0
6700.00	-1.6	-2.2	-13.9	-12.8	1.1	0.6	2.1
6800.00	-1.6	-2.3	-14.0	-12.8	1.1	0.6	1.5
6900.00	-1.6	-2.3	-14.1	-12.8	1.1	0.6	1.4
7000.00	-1.6	-2.3	-14.3	-12.9	1.1	0.6	1.9
7100.00	-1.7	-2.3	-14.1	-12.8	1.1	0.6	2.3
7200.00	-1.7	-2.3	-14.0	-12.8	1.1	0.6	1.7
7300.00	-1.7	-2.4	-13.8	-12.6	1.1	0.6	1.8
7400.00	-1.8	-2.5	-13.3	-12.2	1.1	0.6	2.3
7500.00	-1.9	-2.5	-12.8	-12.0	1.1	0.6	2.3
7600.00	-2.0	-2.6	-12.4	-11.7	1.1	0.6	2.1
7700.00	-2.1	-2.7	-11.7	-11.1	1.1	0.6	2.8
7800.00	-2.1	-2.8	-11.2	-10.7	1.1	0.6	2.3
7900.00	-2.4	-3.0	-10.7	-10.1	1.2	0.6	2.6
8000.00	-2.4	-3.0	-9.8	-9.5	1.1	0.6	2.1

TEST CONDITIONS: $V_{DD} = +5.25$ V, $V_{EN} = 0$ V, $I_{DD} = 3$ mA, $I_{EN} = 0$ mA @ Temperature = +25°C

FREQ (MHz)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
400.0	39.7	38.1	35.2	31.0	26.0	19.4	16.7
1000.0	43.3	41.3	37.6	32.7	26.4	17.9	15.4
2000.0	43.2	43.2	41.6	38.2	33.3	26.4	18.4
4000.0	43.7	43.7	43.8	42.7	40.1	35.7	29.6
6000.0	43.6	43.7	44.5	42.9	39.2	33.6	25.1
8000.0	41.5	42.2	43.5	43.1	39.9	34.6	26.1

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	71.4	71.2	70.7	69.9	67.1	58.1	47.2
1000.0	71.0	71.1	71.3	71.4	69.0	54.4	61.4
2000.0	70.5	70.4	70.4	70.3	69.9	66.5	55.0
4000.0	74.4	74.4	74.4	74.4	74.7	75.0	74.6
6000.0	74.2	74.0	73.7	73.4	73.0	72.1	67.2
8000.0	84.5	84.4	84.3	84.3	84.1	83.4	80.3

FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
400.0	14.1	11.1
1000.0	13.1	10.7
2000.0	15.1	12.3
4000.0	17.5	13.7
6000.0	18.0	14.5
8000.0	18.0	13.4



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +5.25 V, V_{EN} = 0 V, I_{DD} = 3 mA, I_{EN} = 0 mA @ Temperature = +25°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)	FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
					K	Measure				
5500.00	-1.6	-2.3	-20.3	-17.9	1.1	0.7	2.2	5500.0	17.0	13.9
5600.00	-1.6	-2.3	-20.9	-17.9	1.1	0.7	2.1	6000.0	19.0	14.8
5700.00	-1.6	-2.3	-20.7	-17.6	1.1	0.7	2.4	7000.0	20.4	15.7
5800.00	-1.6	-2.3	-20.1	-17.0	1.1	0.6	2.2	8000.0	20.5	14.5
5900.00	-1.6	-2.3	-19.2	-16.4	1.1	0.6	2.0	8500.0	19.2	12.9
6000.00	-1.6	-2.3	-18.4	-15.7	1.1	0.6	2.1			
6100.00	-1.6	-2.3	-17.1	-14.9	1.1	0.6	2.3			
6200.00	-1.6	-2.4	-16.3	-14.2	1.1	0.6	2.4			
6300.00	-1.7	-2.4	-15.3	-13.5	1.1	0.6	2.1			
6400.00	-1.7	-2.4	-14.5	-12.9	1.1	0.6	2.1			
6500.00	-1.7	-2.5	-13.7	-12.3	1.1	0.6	2.3			
6600.00	-1.8	-2.6	-13.0	-11.7	1.1	0.6	2.1			
6700.00	-1.8	-2.6	-12.1	-11.1	1.1	0.6	2.3			
6800.00	-1.9	-2.7	-11.5	-10.6	1.1	0.6	2.4			
6900.00	-2.0	-2.8	-10.8	-10.1	1.1	0.6	2.4			
7000.00	-2.1	-2.9	-10.2	-9.6	1.1	0.6	2.4			
7100.00	-2.2	-3.0	-9.6	-9.1	1.1	0.6	2.6			
7200.00	-2.3	-3.1	-9.1	-8.7	1.1	0.6	2.6			
7300.00	-2.4	-3.2	-8.5	-8.2	1.1	0.6	2.7			
7400.00	-2.5	-3.3	-8.0	-7.8	1.1	0.6	2.5			
7500.00	-2.7	-3.5	-7.5	-7.3	1.1	0.6	2.5			
7600.00	-2.9	-3.6	-7.1	-7.0	1.1	0.6	2.8			
7700.00	-3.1	-3.8	-6.6	-6.5	1.1	0.6	2.3			
7800.00	-3.2	-4.0	-6.2	-6.2	1.1	0.6	2.8			
7900.00	-3.4	-4.2	-5.8	-5.8	1.1	0.6	2.9			
8000.00	-3.6	-4.3	-5.5	-5.6	1.2	0.6	3.4			
8100.00	-3.8	-4.5	-5.1	-5.2	1.2	0.6	3.0			
8200.00	-4.0	-4.7	-4.9	-5.0	1.2	0.6	2.9			
8300.00	-4.2	-4.9	-4.5	-4.7	1.2	0.6	3.0			
8400.00	-4.4	-5.1	-4.3	-4.6	1.2	0.6	3.1			
8500.00	-4.6	-5.3	-4.0	-4.2	1.2	0.6	2.1			

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
5500.0	70.4	70.3	70.1	69.8	69.5	68.4	64.5	42.7	42.5	42.7	41.8	40.9	37.7	31.9
6000.0	77.1	76.9	76.8	76.6	76.3	76.0	74.8	40.6	41.2	41.7	41.9	40.4	36.1	28.4
7000.0	88.8	88.8	88.6	88.4	88.1	87.6	86.6	41.6	40.1	41.4	42.2	39.8	35.5	29.6
8000.0	84.5	84.5	84.5	84.5	84.3	83.9	83.0	41.1	41.7	42.0	41.5	40.7	38.7	33.7
8500.0	92.0	91.8	91.7	91.6	91.5	93.5	90.7	42.1	43.0	43.8	41.7	36.7	29.2	18.3



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +5.75\text{ V}$, $V_{EN} = +5.75\text{ V}$, $I_{DD} = 95\text{ mA}$, $I_{EN} = 2.49\text{ mA}$ @ Temperature = $+25^\circ\text{C}$

FREQ (MHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure										
200.00	15.4	-33.6	-1.9	-4.5	1.4	0.9	21.3	22.5	4.6	32.7	33.8	33.9	34.5	34.5	34.2	33.9
300.00	20.2	-28.7	-5.9	-8.7	1.2	0.8	21.6	22.7	2.4	31.4	33.2	34.9	33.8	34.7	34.3	34.2
400.00	21.7	-27.1	-12.3	-14.5	1.2	0.7	22.0	23.0	1.9	32.2	34.8	35.6	35.5	36.1	35.8	35.5
500.00	22.0	-26.8	-17.8	-16.5	1.1	0.6	22.2	23.1	1.6	32.9	33.9	34.2	35.2	36.3	36.2	36.0
600.00	22.1	-26.8	-17.4	-15.4	1.1	0.6	22.4	23.2	1.5	32.8	35.6	36.6	36.5	36.6	36.9	36.7
700.00	22.1	-26.8	-15.7	-14.5	1.1	0.6	22.6	23.4	1.4	34.4	33.2	35.3	36.1	36.1	36.0	35.6
800.00	22.1	-26.8	-14.7	-14.1	1.1	0.6	22.7	23.4	1.4	34.5	35.9	36.8	36.7	36.5	36.5	36.4
900.00	22.0	-26.9	-14.3	-14.1	1.1	0.6	22.7	23.5	1.4	33.8	36.7	35.2	35.8	36.3	36.2	36.2
1000.00	22.0	-26.9	-14.1	-14.2	1.1	0.6	22.8	23.5	1.5	34.2	34.0	36.0	35.7	36.1	36.1	36.1
1100.00	22.1	-27.0	-14.5	-14.5	1.1	0.6	22.7	23.5	1.4	32.1	35.8	35.0	36.0	35.9	36.2	36.0
1200.00	22.1	-27.0	-14.3	-15.0	1.1	0.7	22.8	23.6	1.4	33.5	35.5	35.0	35.2	35.5	35.4	35.4
1300.00	22.1	-27.0	-14.5	-15.7	1.1	0.7	22.8	23.7	1.4	34.3	35.3	34.4	35.4	35.5	35.2	35.2
1400.00	22.1	-27.0	-14.9	-16.5	1.1	0.7	22.7	23.6	1.4	35.8	35.1	34.9	35.3	35.1	35.2	35.3
1500.00	22.1	-27.1	-15.3	-17.6	1.2	0.7	22.7	23.7	1.5	35.7	35.1	34.5	34.8	34.7	34.3	34.4
1600.00	22.1	-27.1	-15.6	-18.8	1.2	0.7	22.7	23.7	1.4	33.3	34.3	33.9	34.6	34.2	34.3	34.3
1700.00	22.1	-27.2	-15.7	-20.0	1.2	0.7	22.9	23.9	1.5	32.2	32.8	34.6	34.5	34.2	34.3	34.3
1800.00	22.2	-27.2	-16.0	-22.0	1.2	0.7	22.6	23.7	1.5	31.9	34.2	32.6	34.1	34.1	34.2	34.1
1900.00	22.2	-27.3	-16.1	-24.3	1.2	0.7	22.6	23.8	1.5	32.0	33.5	33.6	33.2	33.7	33.6	33.6
2000.00	22.2	-27.3	-16.1	-27.1	1.2	0.7	22.4	23.7	1.6	33.5	34.7	32.8	33.8	33.9	34.0	33.9
2100.00	22.2	-27.3	-15.8	-29.3	1.2	0.7	22.6	23.9	1.6	32.3	32.0	33.4	33.8	33.7	33.7	33.7
2200.00	22.2	-27.4	-15.4	-28.9	1.2	0.7	22.5	23.8	1.6	31.6	33.7	32.6	33.5	33.6	33.8	33.8
2300.00	22.2	-27.4	-15.0	-26.3	1.2	0.7	22.4	23.9	1.6	33.6	32.4	33.4	33.2	33.5	33.6	33.6
2400.00	22.2	-27.5	-14.5	-23.9	1.2	0.7	22.3	24.0	1.7	31.0	31.3	31.9	31.9	31.9	31.9	31.8
2500.00	22.2	-27.7	-14.1	-22.1	1.2	0.7	22.1	24.0	1.7	31.5	31.3	31.7	31.5	31.9	31.7	31.6
2600.00	22.2	-27.7	-13.7	-20.6	1.2	0.8	21.9	24.1	1.7	31.0	31.1	31.6	31.7	31.9	31.8	31.6
2700.00	22.2	-27.8	-13.2	-19.4	1.2	0.8	21.5	23.6	1.7	30.4	31.4	31.7	31.7	31.8	31.8	31.8
2800.00	22.1	-27.9	-12.8	-18.3	1.2	0.8	21.3	23.4	1.7	33.7	32.0	31.4	31.5	31.3	31.2	31.2
2900.00	22.1	-28.0	-12.3	-17.2	1.2	0.8	21.1	23.2	1.8	33.0	31.6	31.8	31.5	31.6	31.6	31.6
3000.00	22.1	-28.1	-11.9	-16.5	1.2	0.8	21.3	23.5	1.8	30.0	29.7	29.9	30.3	30.3	30.2	30.0
3100.00	22.1	-28.1	-11.5	-15.9	1.2	0.8	21.2	23.7	1.7	29.1	30.8	30.3	30.1	30.2	30.1	29.9
3200.00	22.1	-28.2	-11.2	-15.5	1.2	0.8	21.2	23.7	1.8	29.9	30.7	30.8	30.7	30.8	30.7	30.7
3300.00	22.1	-28.2	-11.0	-15.3	1.2	0.8	21.2	23.6	1.7	30.9	30.4	30.4	30.2	30.4	30.3	30.2
3400.00	22.1	-28.2	-10.8	-15.0	1.2	0.8	21.0	23.4	1.8	30.7	30.4	30.7	30.3	30.6	30.6	30.6
3500.00	22.1	-28.3	-10.8	-15.0	1.2	0.8	21.1	23.5	1.8	29.0	29.9	30.0	30.0	30.1	30.1	30.0
3600.00	22.1	-28.3	-10.8	-15.1	1.2	0.8	21.1	23.5	1.7	29.8	29.9	30.0	30.1	30.2	30.1	30.1
3700.00	22.1	-28.3	-10.7	-15.2	1.2	0.8	21.2	23.7	1.7	29.9	30.8	30.8	30.7	31.0	31.0	31.2
3800.00	22.1	-28.4	-10.9	-15.4	1.2	0.8	21.5	23.8	1.7	30.3	30.0	30.3	30.2	30.6	30.7	30.7
3900.00	22.2	-28.4	-11.0	-15.7	1.2	0.8	21.6	23.8	1.7	29.5	30.0	30.0	30.2	30.3	30.3	30.5
4000.00	22.2	-28.4	-11.1	-16.1	1.2	0.8	21.8	24.0	1.7	28.4	30.4	30.3	30.3	30.4	30.6	30.6
4100.00	22.2	-28.5	-11.4	-16.7	1.2	0.8	21.9	24.1	1.7	29.1	29.1	29.7	29.8	29.9	29.9	29.9
4200.00	22.3	-28.4	-11.6	-17.4	1.2	0.8	21.9	24.0	1.7	29.0	29.8	29.6	29.7	29.8	30.1	30.2
4300.00	22.4	-28.5	-11.9	-17.8	1.2	0.8	22.0	24.0	1.7	29.9	30.2	29.6	29.9	30.2	30.3	30.3
4400.00	22.4	-28.5	-12.4	-18.7	1.2	0.8	21.9	24.1	1.7	28.7	29.0	29.7	29.8	30.0	30.1	30.3
4500.00	22.5	-28.6	-12.8	-19.6	1.3	0.8	21.8	24.1	1.7	29.9	29.1	29.7	29.6	29.8	29.8	29.9
4600.00	22.5	-28.7	-13.4	-20.5	1.3	0.8	21.5	24.0	1.7	30.3	28.9	29.1	29.4	29.5	29.5	29.6
4700.00	22.5	-28.7	-14.0	-22.0	1.3	0.8	21.6	23.9	1.7	29.2	29.0	29.3	29.5	29.6	29.7	29.7
4800.00	22.6	-28.8	-14.5	-22.6	1.3	0.8	21.6	23.8	1.7	29.1	29.1	29.4	29.4	29.6	29.9	30.1
4900.00	22.6	-28.9	-15.5	-23.7	1.3	0.8	21.4	23.7	1.6	28.4	28.7	27.7	27.7	27.9	28.0	29.1
5000.00	22.7	-28.9	-16.1	-25.7	1.3	0.8	21.4	23.6	1.7	28.1	28.6	28.4	28.5	28.6	28.7	28.7
5100.00	22.8	-29.0	-16.7	-26.2	1.3	0.8	21.7	23.6	1.6	28.0	28.1	28.2	28.4	28.5	28.8	29.0
5200.00	22.7	-29.0	-18.0	-27.7	1.3	0.8	21.7	23.6	1.7	28.1	28.5	28.3	28.6	28.8	29.1	29.4
5300.00	22.8	-29.0	-18.1	-28.3	1.3	0.8	21.7	23.6	1.7	28.9	28.1	28.5	28.8	29.0	29.3	29.6
5400.00	22.8	-29.3	-18.7	-27.5	1.3	0.8	21.4	23.6	1.7	27.9	28.0	28.1	28.1	28.4	28.6	28.8
5500.00	22.8	-29.2	-19.3	-30.1	1.3	0.8	21.0	23.4	1.7	27.3	27.7	27.6	27.8	28.1	28.2	28.3
5600.00	22.9	-29.3	-17.8	-27.7	1.3	0.8	20.4	23.0	1.8	27.9	27.2	27.7	27.7	27.9	28.0	28.0
5700.00	22.8	-29.5	-17.6	-25.8	1.4	0.8	20.2	22.8	1.8	27.3	27.4	27.5	27.7	27.9	28.0	28.0
5800.00	22.9	-29.4	-16.7	-26.2	1.3	0.8	20.0	22.5	1.8	26.8	27.3	27.2	27.3	27.4	27.5	27.5
5900.00	22.9	-29.7	-14.7	-22.6	1.3	0.8	20.0	22.3	1.8	26.7	27.5	27.1	27.3	27.3	27.4	27.4
6000.00	22.7	-29.8	-14.5	-22.3	1.4	0.8	19.6	21.5	2.0	27.0	26.5	26.5	26.6	26.6	26.6	26.6
6100.00	22.9	-29.8	-12.9	-20.5	1.3	0.8	19.7	21.3	1.8	26.3	26.6	26.5	26.6	26.7	26.7	26.8
6200.00	22.7	-30.3	-11.4	-17.9	1.4	0.9	19.6	21.0	1.9	26.2	26.5	26.2	26.2	26.3	26.4	26.4
6300.00	22.6	-30.3	-11.0	-17.5	1.4	0.9	19.5	20.8	1.9	26.0	26.2	26.2	26.4	26.4	26.6	26.8
6400.00	22.7	-30.5</														

TEST CONDITIONS: $V_{DD} = +5.75$ V, $V_{EN} = +5.75$ V, $I_{DD} = 95$ mA, $I_{EN} = 2.49$ mA @ Temperature = $+25^\circ\text{C}$

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	44.7	44.6	44.6	44.5	44.4	44.3	44.0
1000.0	43.8	43.7	43.7	43.5	43.3	43.1	42.8
2000.0	41.5	41.2	41.2	41.0	40.8	40.6	40.4
4000.0	45.1	45.0	44.9	44.7	44.5	44.2	44.2
6000.0	34.1	33.9	33.7	33.4	33.1	32.8	32.6
8000.0	38.5	38.1	37.8	37.6	37.8	39.0	41.1

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +5.75$ V, $V_{EN} = +5.75$ V, $I_{DD} = 102$ mA, $I_{EN} = 2.47$ mA @ Temperature = $+25^\circ\text{C}$

FREQ (MHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure (dBm)										
5500.00	22.1	-30.0	-10.3	-9.7	1.4	0.8	20.5	23.2	1.6	27.0	28.0	28.4	28.6	28.7	28.9	
5600.00	22.2	-30.0	-10.1	-9.8	1.3	0.8	20.3	23.0	1.6	27.3	27.1	27.5	27.7	27.8	27.8	
5700.00	22.2	-30.1	-10.5	-10.0	1.4	0.8	19.9	22.9	1.6	27.0	27.1	27.4	27.6	27.8	27.9	
5800.00	22.4	-30.1	-10.2	-10.1	1.4	0.8	19.9	22.9	1.6	26.8	26.7	27.1	27.3	27.5	27.7	
5900.00	22.3	-30.1	-10.6	-10.4	1.4	0.8	19.3	22.1	1.6	26.8	26.8	26.7	26.9	27.0	27.0	
6000.00	22.5	-30.2	-10.2	-10.3	1.4	0.8	19.1	21.6	1.6	25.4	25.3	25.5	25.4	25.6	25.6	
6100.00	22.5	-30.1	-10.6	-10.6	1.4	0.8	19.5	21.8	1.6	26.0	26.2	26.0	26.1	26.3	26.6	
6200.00	22.6	-30.3	-10.2	-10.5	1.4	0.8	19.6	21.7	1.6	25.4	25.0	25.6	25.8	25.9	26.1	
6300.00	22.6	-30.2	-10.6	-10.9	1.4	0.8	20.2	22.1	1.6	26.6	26.6	26.4	26.5	26.7	27.0	
6400.00	22.7	-30.5	-10.2	-10.7	1.4	0.8	20.5	22.2	1.6	26.4	26.2	26.2	26.4	26.7	27.0	
6500.00	22.7	-30.5	-10.5	-11.1	1.4	0.8	20.4	22.1	1.6	25.8	26.0	26.3	26.5	26.7	27.0	
6600.00	22.8	-30.8	-10.2	-11.0	1.4	0.8	20.4	21.8	1.6	26.3	26.8	26.4	26.5	26.8	27.1	
6700.00	22.8	-30.8	-10.6	-11.5	1.4	0.8	20.1	21.5	1.7	26.0	25.7	26.2	26.3	26.6	27.1	
6800.00	22.9	-31.1	-10.4	-11.4	1.4	0.8	20.3	21.7	1.7	26.4	26.3	26.5	26.7	27.0	27.9	
6900.00	22.8	-31.2	-10.8	-11.9	1.5	0.8	20.6	22.0	1.7	26.5	26.2	26.5	26.7	27.0	28.0	
7000.00	22.9	-31.5	-10.5	-11.9	1.5	0.9	20.7	21.9	1.7	26.0	25.9	26.1	26.2	26.7	27.1	
7100.00	22.9	-31.5	-11.0	-12.5	1.5	0.9	20.6	21.9	1.7	26.3	26.2	26.3	26.6	26.9	27.3	
7200.00	22.9	-32.0	-10.8	-12.5	1.6	0.9	20.8	21.9	1.8	25.8	26.1	26.2	26.5	26.7	27.8	
7300.00	22.8	-32.1	-11.4	-13.3	1.6	0.9	20.8	21.9	1.8	25.6	25.9	25.7	25.9	26.3	26.8	
7400.00	22.8	-32.7	-11.0	-13.4	1.7	0.9	20.8	21.8	1.9	25.8	25.6	25.7	26.0	26.4	26.9	
7500.00	22.7	-32.9	-11.5	-14.6	1.8	0.9	20.2	21.5	2.0	25.3	25.6	25.7	26.0	26.4	27.7	
7600.00	22.6	-33.7	-10.8	-14.7	1.9	1.0	20.6	21.6	2.0	25.9	25.8	25.8	26.0	26.4	26.9	
7700.00	22.4	-33.9	-11.1	-16.4	2.0	1.0	20.6	21.4	2.1	24.3	24.3	24.6	24.9	25.3	25.8	
7800.00	22.2	-34.9	-10.0	-16.4	2.2	1.0	20.2	21.1	2.2	24.6	25.5	25.3	25.5	25.9	26.5	
7900.00	21.8	-35.2	-10.0	-18.5	2.4	1.0	20.0	20.9	2.3	24.8	24.8	25.2	25.5	25.9	26.5	
8000.00	21.4	-36.7	-8.6	-17.5	2.8	1.1	19.3	20.3	2.4	24.3	24.4	24.6	25.0	25.4	27.2	
8100.00	20.9	-37.1	-8.3	-18.4	3.0	1.1	19.6	20.3	2.5	24.1	24.5	24.7	25.0	25.4	27.0	
8200.00	20.2	-39.2	-6.8	-15.5	3.8	1.2	19.5	20.1	2.7	23.4	23.9	24.1	24.8	25.6	26.8	
8300.00	19.6	-39.0	-6.5	-14.7	3.8	1.2	19.4	20.0	2.8	23.8	24.0	24.1	24.4	25.0	25.8	
8400.00	18.4	-41.9	-5.3	-11.8	5.2	1.2	19.1	19.5	3.0	24.1	23.9	24.1	24.4	25.1	26.0	
8500.00	17.8	-42.0	-4.8	-10.8	5.3	1.2	18.5	18.9	3.2	22.8	22.5	23.0	23.5	24.2	25.4	

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
5500.0	38.4	38.4	38.2	38.0	37.9	37.7	37.6
6000.0	34.7	34.6	34.4	34.2	34.0	33.7	33.6
7000.0	44.2	44.1	43.9	43.7	43.4	43.3	43.3
8000.0	52.3	52.2	52.0	51.8	51.5	51.4	51.4
8500.0	60.6	60.4	60.2	60.0	59.8	59.7	60.0



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +5.75 V, V_{EN} = 0 V, I_{DD} = 4 mA, I_{EN} = 0 mA @ Temperature = +25°C

FREQ (MHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	K	Stability Measure	Noise Figure (dB)
200.00	-3.7	-3.8	-4.0	-8.9	1.1	0.9	3.4
300.00	-2.4	-2.4	-6.6	-11.7	1.0	0.7	2.0
400.00	-1.7	-1.8	-9.2	-13.8	1.0	0.6	1.6
500.00	-1.4	-1.5	-11.9	-15.6	1.0	0.5	1.4
600.00	-1.3	-1.3	-14.9	-16.9	1.0	0.5	1.3
700.00	-1.2	-1.3	-18.1	-17.9	1.0	0.4	1.4
800.00	-1.2	-1.2	-22.0	-18.1	1.0	0.4	1.3
900.00	-1.1	-1.2	-27.3	-17.9	1.0	0.4	1.1
1000.00	-1.1	-1.2	-31.5	-17.5	1.0	0.4	0.9
1100.00	-1.1	-1.2	-27.1	-17.2	1.0	0.4	1.1
1200.00	-1.1	-1.2	-23.2	-16.9	1.0	0.4	1.3
1300.00	-1.1	-1.3	-20.7	-16.4	1.0	0.4	1.2
1400.00	-1.2	-1.3	-18.8	-15.9	1.0	0.4	0.9
1500.00	-1.2	-1.3	-17.4	-15.6	1.0	0.4	1.3
1600.00	-1.3	-1.4	-16.3	-15.4	1.0	0.5	1.4
1700.00	-1.3	-1.4	-15.5	-15.4	1.0	0.5	1.3
1800.00	-1.3	-1.5	-14.8	-15.3	1.0	0.5	1.5
1900.00	-1.3	-1.5	-14.3	-15.2	1.0	0.5	1.5
2000.00	-1.4	-1.6	-13.9	-15.1	1.0	0.5	1.7
2100.00	-1.4	-1.6	-13.7	-15.3	1.0	0.5	1.3
2200.00	-1.4	-1.6	-13.4	-15.5	1.0	0.5	1.4
2300.00	-1.5	-1.7	-13.3	-15.8	1.0	0.5	1.7
2400.00	-1.5	-1.7	-13.2	-16.1	1.0	0.6	1.8
2500.00	-1.5	-1.8	-13.2	-16.6	1.0	0.6	1.8
2600.00	-1.5	-1.8	-13.3	-17.3	1.1	0.6	1.9
2700.00	-1.5	-1.9	-13.4	-18.1	1.1	0.6	1.7
2800.00	-1.6	-2.0	-13.5	-18.9	1.1	0.6	2.1
2900.00	-1.6	-2.0	-13.7	-19.7	1.1	0.6	2.1
3000.00	-1.6	-2.0	-13.8	-20.9	1.1	0.6	1.8
3100.00	-1.6	-2.0	-13.9	-22.4	1.1	0.6	1.8
3200.00	-1.6	-2.0	-14.0	-24.2	1.1	0.6	2.1
3300.00	-1.6	-2.0	-14.1	-26.1	1.1	0.6	2.1
3400.00	-1.6	-2.0	-14.1	-28.0	1.1	0.6	2.0
3500.00	-1.7	-2.0	-14.1	-29.1	1.1	0.6	2.3
3600.00	-1.7	-2.0	-14.0	-27.0	1.1	0.6	1.6
3700.00	-1.7	-2.0	-14.0	-24.5	1.1	0.6	1.8
3800.00	-1.7	-2.0	-13.8	-22.3	1.1	0.6	2.1
3900.00	-1.7	-2.0	-13.5	-20.7	1.1	0.6	1.8
4000.00	-1.7	-2.0	-13.3	-19.1	1.1	0.6	1.9
4100.00	-1.8	-2.1	-13.0	-17.7	1.1	0.6	2.1
4200.00	-1.8	-2.1	-12.7	-16.6	1.1	0.6	2.2
4300.00	-1.8	-2.1	-12.5	-15.7	1.1	0.6	2.0
4400.00	-1.8	-2.1	-12.2	-15.0	1.1	0.6	2.0
4500.00	-1.8	-2.2	-11.9	-14.2	1.1	0.6	2.0
4600.00	-1.9	-2.2	-11.7	-13.6	1.1	0.6	1.8
4700.00	-1.9	-2.2	-11.5	-13.1	1.1	0.6	2.1
4800.00	-1.9	-2.3	-11.4	-12.8	1.1	0.6	2.0
4900.00	-1.9	-2.3	-11.2	-12.5	1.1	0.6	2.0
5000.00	-1.9	-2.3	-11.1	-12.1	1.1	0.6	2.4
5100.00	-1.9	-2.3	-11.0	-11.9	1.1	0.6	1.9
5200.00	-1.9	-2.4	-10.9	-11.7	1.1	0.6	2.9
5300.00	-1.9	-2.4	-10.9	-11.6	1.1	0.6	1.7
5400.00	-1.9	-2.4	-10.9	-11.5	1.1	0.6	1.8
5500.00	-1.9	-2.4	-10.9	-11.3	1.1	0.6	1.9
5600.00	-1.9	-2.4	-11.1	-11.4	1.1	0.6	2.6
5700.00	-1.9	-2.4	-11.1	-11.4	1.1	0.6	2.4
5800.00	-1.8	-2.4	-11.3	-11.3	1.1	0.6	2.3
5900.00	-1.8	-2.4	-11.6	-11.6	1.1	0.6	2.2
6000.00	-1.8	-2.4	-11.7	-11.5	1.1	0.6	2.8
6100.00	-1.7	-2.3	-12.0	-11.7	1.1	0.6	2.0
6200.00	-1.7	-2.3	-12.4	-12.0	1.1	0.6	2.3
6300.00	-1.7	-2.3	-12.6	-12.0	1.1	0.6	2.1
6400.00	-1.7	-2.3	-13.0	-12.3	1.1	0.6	1.9
6500.00	-1.7	-2.3	-13.2	-12.3	1.1	0.6	2.1
6600.00	-1.6	-2.3	-13.4	-12.4	1.1	0.6	2.1
6700.00	-1.6	-2.3	-13.9	-12.7	1.1	0.6	1.9
6800.00	-1.7	-2.3	-14.0	-12.8	1.1	0.6	2.2
6900.00	-1.6	-2.3	-14.1	-12.8	1.1	0.6	2.0
7000.00	-1.7	-2.3	-14.2	-12.9	1.1	0.6	2.2
7100.00	-1.7	-2.4	-14.1	-12.8	1.1	0.6	2.6
7200.00	-1.7	-2.4	-14.0	-12.8	1.1	0.6	2.3
7300.00	-1.8	-2.4	-13.8	-12.6	1.1	0.6	2.2
7400.00	-1.8	-2.5	-13.3	-12.2	1.1	0.6	1.7
7500.00	-1.9	-2.5	-12.8	-12.0	1.1	0.6	2.7
7600.00	-2.0	-2.7	-12.4	-11.7	1.1	0.6	2.4
7700.00	-2.1	-2.7	-11.7	-11.1	1.1	0.6	2.4
7800.00	-2.2	-2.8	-11.2	-10.7	1.1	0.6	2.9
7900.00	-2.4	-3.0	-10.7	-10.1	1.2	0.6	2.7
8000.00	-2.4	-3.0	-9.8	-9.5	1.1	0.6	2.5

FREQ (MHz)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
400.0	37.9	36.6	33.9	29.9	25.0	18.5	16.4
1000.0	41.5	39.8	36.5	31.9	25.6	17.2	15.4
2000.0	41.7	41.9	40.4	37.2	32.5	25.4	18.1
4000.0	42.2	43.4	42.9	41.6	39.0	34.7	28.4
6000.0	41.4	42.2	42.7	41.3	38.0	32.5	23.6
8000.0	40.5	41.7	42.6	41.9	38.8	33.5	24.5

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	70.9	70.7	70.2	69.3	66.2	56.5	46.5
1000.0	70.9	71.0	71.2	71.1	68.0	53.5	61.5
2000.0	70.1	70.0	70.0	70.2	69.6	65.9	54.8
4000.0	74.4	74.4	74.3	74.4	74.7	75.1	74.6
6000.0	74.2	74.0	73.7	73.4	73.0	72.1	65.9
8000.0	84.4	84.3	84.2	84.2	84.0	83.2	79.4

FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
400.0	13.9	10.9
1000.0	12.9	10.6
2000.0	14.9	12.1
4000.0	17.3	13.5
6000.0	17.8	14.3
8000.0	18.0	13.1

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +5.75V, V_{EN} = 0 V, I_{DD} = 4 mA, I_{EN} = 0 mA @ Temperature = +25°C

FREQ (MHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)	FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
					K	Measure				
5500.00	-1.7	-2.3	-20.1	-17.8	1.1	0.7	2.3	5500.0	16.8	13.6
5600.00	-1.6	-2.3	-20.6	-17.7	1.1	0.7	2.1	6000.0	18.7	14.5
5700.00	-1.6	-2.3	-20.5	-17.5	1.1	0.7	2.1	7000.0	20.0	15.6
5800.00	-1.6	-2.3	-19.9	-16.8	1.1	0.7	2.1	8000.0	19.7	13.7
5900.00	-1.6	-2.3	-19.0	-16.2	1.1	0.7	2.2	8500.0	18.9	12.5
6000.00	-1.6	-2.3	-18.2	-15.5	1.1	0.7	2.2			
6100.00	-1.6	-2.4	-17.1	-14.8	1.1	0.6	2.2			
6200.00	-1.7	-2.4	-16.3	-14.2	1.1	0.6	2.4			
6300.00	-1.7	-2.4	-15.2	-13.4	1.1	0.6	2.5			
6400.00	-1.7	-2.5	-14.5	-12.9	1.1	0.6	1.9			
6500.00	-1.8	-2.5	-13.6	-12.2	1.1	0.6	2.5			
6600.00	-1.8	-2.6	-13.0	-11.7	1.1	0.6	1.9			
6700.00	-1.9	-2.6	-12.1	-11.1	1.1	0.6	2.6			
6800.00	-1.9	-2.7	-11.5	-10.6	1.1	0.6	2.3			
6900.00	-2.0	-2.8	-10.8	-10.0	1.1	0.6	2.5			
7000.00	-2.1	-2.9	-10.2	-9.6	1.1	0.6	2.5			
7100.00	-2.2	-3.0	-9.6	-9.1	1.1	0.6	2.2			
7200.00	-2.3	-3.1	-9.1	-8.7	1.1	0.6	2.4			
7300.00	-2.5	-3.2	-8.5	-8.2	1.1	0.6	2.3			
7400.00	-2.6	-3.4	-8.0	-7.8	1.1	0.6	2.9			
7500.00	-2.7	-3.5	-7.5	-7.3	1.1	0.6	2.6			
7600.00	-2.9	-3.7	-7.1	-7.0	1.1	0.6	2.5			
7700.00	-3.1	-3.8	-6.6	-6.5	1.1	0.6	2.5			
7800.00	-3.3	-4.0	-6.2	-6.2	1.1	0.6	3.0			
7900.00	-3.5	-4.2	-5.8	-5.8	1.2	0.6	2.9			
8000.00	-3.6	-4.4	-5.5	-5.6	1.2	0.6	3.2			
8100.00	-3.8	-4.6	-5.1	-5.2	1.2	0.6	3.1			
8200.00	-4.1	-4.8	-4.9	-5.0	1.2	0.6	2.9			
8300.00	-4.3	-5.0	-4.5	-4.7	1.2	0.6	3.3			
8400.00	-4.5	-5.2	-4.3	-4.6	1.2	0.6	3.5			
8500.00	-4.6	-5.3	-4.0	-4.2	1.2	0.6	3.4			

FREQ (MHz)	IP-2 Output Pout = -2	IP-2 Output Pout = +0	IP-2 Output Pout = +2	IP-2 Output Pout = +4	IP-2 Output Pout = +6	IP-2 Output Pout = +8	IP-2 Output Pout = +10	IP-3 Output Pout = -2	IP-3 Output Pout = +0	IP-3 Output Pout = +2	IP-3 Output Pout = +4	IP-3 Output Pout = +6	IP-3 Output Pout = +8	IP-3 Output Pout = +10
	(dBm)													
5500.0	70.5	70.4	70.2	70.0	69.7	68.6	64.4	41.5	41.8	41.9	41.2	40.1	36.5	30.6
6000.0	76.8	76.8	76.6	76.5	76.2	75.9	74.3	40.3	41.6	41.4	41.1	39.3	34.8	26.6
7000.0	88.7	88.7	88.5	88.3	88.0	87.4	85.9	40.6	40.1	40.7	41.3	38.7	34.4	28.3
8000.0	84.4	84.4	84.4	84.3	84.1	83.7	82.2	40.5	41.2	41.5	40.6	39.8	37.6	32.3
8500.0	91.7	91.6	91.5	91.4	91.3	92.9	93.0	42.2	43.3	43.2	40.6	35.4	27.6	17.7



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +6.0 V, V_{EN} = +6.0 V, I_{DD} = 104 mA, I_{EN} = 2.60 mA @ Temperature = +25°C

FREQ (GHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure										
200.00	15.5	-33.7	-1.9	-4.5	1.4	0.9	21.7	22.9	4.7	36.1	33.8	35.2	34.4	35.3	35.2	34.9
300.00	20.3	-28.7	-5.9	-8.6	1.2	0.8	22.0	23.1	2.5	30.5	34.0	35.6	35.4	35.3	35.1	35.1
400.00	21.8	-27.2	-12.5	-14.4	1.2	0.7	22.4	23.4	1.9	31.7	36.4	34.9	36.6	37.4	36.6	36.4
500.00	22.1	-26.9	-17.7	-16.1	1.1	0.6	22.7	23.4	1.6	31.3	35.6	36.5	36.9	36.8	37.3	36.9
600.00	22.2	-26.9	-17.0	-15.1	1.1	0.6	22.8	23.5	1.5	36.0	34.9	37.3	37.3	37.7	37.6	37.7
700.00	22.1	-26.9	-15.3	-14.2	1.1	0.6	23.0	23.7	1.4	32.8	35.1	35.6	37.2	37.1	36.7	36.7
800.00	22.1	-27.0	-14.4	-13.8	1.1	0.6	23.1	23.8	1.5	33.3	36.9	37.8	37.6	37.7	37.6	37.5
900.00	22.1	-27.0	-14.0	-13.7	1.1	0.6	23.2	23.9	1.5	35.2	36.7	36.1	37.1	37.2	37.4	37.2
1000.00	22.1	-27.0	-13.8	-13.9	1.1	0.6	23.2	23.9	1.5	34.3	36.7	36.5	37.2	37.0	37.1	37.2
1100.00	22.1	-27.1	-13.9	-14.2	1.1	0.6	23.1	23.9	1.4	36.9	36.8	36.2	37.0	37.1	37.0	37.0
1200.00	22.2	-27.1	-14.0	-14.7	1.1	0.7	23.2	24.0	1.5	38.2	37.0	35.8	36.0	36.4	36.5	36.5
1300.00	22.2	-27.2	-14.3	-15.2	1.1	0.7	23.2	24.0	1.4	33.4	35.2	35.7	35.6	36.2	36.0	36.1
1400.00	22.2	-27.1	-14.7	-16.0	1.1	0.7	23.1	23.9	1.4	35.6	34.0	36.0	35.2	35.7	36.3	36.2
1500.00	22.2	-27.2	-15.1	-17.0	1.2	0.7	23.1	24.1	1.5	31.5	35.0	35.4	35.3	35.3	35.3	35.3
1600.00	22.2	-27.2	-15.5	-18.2	1.2	0.7	23.1	24.1	1.4	33.2	33.7	34.8	34.9	35.2	35.2	35.2
1700.00	22.2	-27.3	-15.7	-19.3	1.2	0.7	23.2	24.2	1.5	33.7	34.5	34.6	35.1	35.1	35.1	35.3
1800.00	22.3	-27.3	-16.0	-21.1	1.2	0.7	23.0	24.1	1.5	33.5	34.1	35.3	34.5	34.7	34.9	35.0
1900.00	22.3	-27.3	-16.3	-23.2	1.2	0.7	23.0	24.1	1.5	34.4	32.3	34.8	34.1	34.5	34.5	34.5
2000.00	22.3	-27.3	-16.3	-25.8	1.2	0.7	22.8	24.0	1.6	33.2	33.6	34.2	33.8	34.6	34.9	34.9
2100.00	22.3	-27.4	-16.1	-28.3	1.2	0.7	23.0	24.2	1.6	33.4	34.0	34.8	34.3	34.6	34.7	34.7
2200.00	22.3	-27.5	-15.8	-29.0	1.2	0.7	22.9	24.2	1.6	34.8	32.7	34.0	34.0	34.1	34.6	34.6
2300.00	22.4	-27.5	-15.4	-27.0	1.2	0.7	22.8	24.3	1.6	32.5	31.8	33.4	34.0	34.2	34.3	34.5
2400.00	22.3	-27.6	-14.9	-24.7	1.2	0.7	22.6	24.4	1.7	33.7	32.8	32.4	32.7	32.7	32.7	32.7
2500.00	22.3	-27.7	-14.5	-22.9	1.2	0.7	22.5	24.4	1.7	33.1	33.0	32.2	32.1	32.5	32.6	32.6
2600.00	22.3	-27.8	-14.1	-21.3	1.2	0.7	22.3	24.4	1.7	32.2	32.1	31.8	32.6	32.4	32.7	32.6
2700.00	22.3	-27.8	-13.6	-20.0	1.2	0.8	21.9	24.0	1.8	33.8	32.4	33.0	32.3	32.5	32.7	32.7
2800.00	22.3	-28.0	-13.1	-18.8	1.2	0.8	21.8	23.8	1.8	32.8	31.1	31.6	31.9	32.0	32.1	32.1
2900.00	22.2	-28.1	-12.6	-17.7	1.2	0.8	21.5	23.6	1.8	31.5	32.0	32.5	32.4	32.5	32.5	32.5
3000.00	22.2	-28.2	-12.2	-16.9	1.2	0.8	21.7	23.8	1.8	30.1	30.8	31.2	31.1	31.1	31.1	31.1
3100.00	22.2	-28.2	-11.8	-16.3	1.2	0.8	21.6	23.9	1.8	31.3	30.5	30.4	31.0	31.1	31.0	31.0
3200.00	22.2	-28.2	-11.4	-15.8	1.2	0.8	21.6	24.0	1.8	31.8	31.5	31.0	31.3	31.6	31.6	31.6
3300.00	22.2	-28.3	-11.2	-15.6	1.2	0.8	21.6	23.9	1.7	29.5	31.3	30.8	31.1	31.1	31.1	31.1
3400.00	22.2	-28.4	-11.0	-15.3	1.2	0.8	21.4	23.7	1.8	31.2	30.5	31.0	31.2	31.3	31.5	31.5
3500.00	22.2	-28.3	-11.0	-15.3	1.2	0.8	21.5	23.8	1.7	29.5	31.6	30.6	30.9	31.0	30.9	30.9
3600.00	22.2	-28.3	-11.0	-15.4	1.2	0.8	21.5	23.7	1.7	30.4	30.4	30.7	30.9	31.0	31.0	31.0
3700.00	22.3	-28.4	-10.9	-15.5	1.2	0.8	21.6	23.9	1.8	29.5	30.8	31.4	31.4	31.6	31.8	32.0
3800.00	22.3	-28.4	-11.0	-15.8	1.2	0.8	21.8	24.0	1.7	30.9	30.2	30.7	30.8	31.2	31.3	31.5
3900.00	22.3	-28.5	-11.1	-16.1	1.2	0.8	22.0	24.1	1.7	30.6	31.0	30.3	30.7	31.0	31.1	31.3
4000.00	22.4	-28.5	-11.2	-16.5	1.2	0.8	22.2	24.2	1.7	30.3	30.8	30.7	31.0	31.2	31.4	31.4
4100.00	22.4	-28.6	-11.6	-17.1	1.2	0.8	22.3	24.3	1.7	29.0	29.7	30.1	30.3	30.5	30.7	30.9
4200.00	22.4	-28.6	-11.8	-17.8	1.2	0.8	22.3	24.3	1.7	28.9	30.2	30.0	30.3	30.4	30.8	31.0
4300.00	22.5	-28.6	-12.0	-18.3	1.2	0.8	22.3	24.2	1.7	29.1	30.3	30.4	30.5	30.6	30.9	31.1
4400.00	22.5	-28.5	-12.6	-19.2	1.2	0.8	22.3	24.3	1.7	29.1	29.9	30.0	30.3	30.5	30.8	31.0
4500.00	22.6	-28.6	-12.9	-20.2	1.2	0.8	22.1	24.2	1.7	29.7	29.3	30.1	30.1	30.4	30.6	30.8
4600.00	22.6	-28.7	-13.5	-21.2	1.3	0.8	21.9	24.1	1.7	29.7	29.8	29.7	29.8	30.1	30.3	30.4
4700.00	22.7	-28.6	-14.1	-22.8	1.2	0.8	21.9	24.1	1.7	29.0	29.2	29.8	29.9	30.1	30.2	30.5
4800.00	22.7	-28.8	-14.6	-23.3	1.3	0.8	21.9	24.0	1.7	29.8	29.8	30.0	30.2	30.5	30.8	30.8
4900.00	22.7	-28.9	-15.6	-24.6	1.3	0.8	21.6	23.9	1.7	28.3	29.2	29.2	29.3	29.4	29.7	29.8
5000.00	22.8	-28.9	-16.2	-26.9	1.3	0.8	21.7	23.8	1.7	29.6	29.0	28.7	29.0	29.2	29.4	29.5
5100.00	22.9	-28.9	-16.9	-27.4	1.3	0.8	22.0	23.8	1.7	27.7	28.2	28.4	28.7	29.1	29.4	29.7
5200.00	22.9	-29.0	-18.2	-29.3	1.3	0.8	22.0	23.8	1.7	28.2	28.6	28.6	29.0	29.3	29.6	30.1
5300.00	23.0	-29.0	-18.3	-29.5	1.3	0.8	22.0	23.8	1.7	28.5	28.7	28.8	29.2	29.4	29.8	30.2
5400.00	22.9	-29.3	-19.0	-29.0	1.3	0.8	21.6	23.7	1.7	28.7	28.2	28.3	28.6	28.8	29.2	29.5
5500.00	23.0	-29.2	-19.7	-32.2	1.3	0.8	21.3	23.5	1.8	28.7	28.1	28.2	28.5	28.8	29.0	29.0
5600.00	23.1	-29.3	-18.1	-28.6	1.3	0.8	20.7	23.1	1.8	27.7	27.8	28.1	28.0	28.5	28.6	28.8
5700.00	22.9	-29.6	-17.9	-26.9	1.3	0.8	20.4	22.8	1.8	26.9	27.7	28.3	28.0	28.4	28.6	28.7
5800.00	23.0	-29.5	-17.1	-27.2	1.3	0.8	20.3	22.6	1.8	27.3	27.4	27.4	27.7	27.9	28.1	28.2
5900.00	23.0	-29.7	-14.9	-23.2	1.3	0.8	20.2	22.3	1.8	27.0	27.2	27.4	27.6	27.8	27.9	28.1
6000.00	22.9	-29.8	-14.8	-23.0	1.4	0.8	19.9	21.6	2.0	26.5	26.9	27.0	27.1	27.2	27.3	27.3
6100.00	23.0	-29.8	-13.1	-20.9	1.3	0.8	19.9	21.4	1.8	26.4	26.9	26.7	26.9	27.1	27.3	27.5
6200.00	22.9	-29.3	-11.6	-18.2	1.4	0.9	19.9	21.1	1.9	26.6	26.2	26.5	26.6	26.7	26.9	27.1
6300.00	22.8	-30.2	-11.2	-17.8	1.4	0.9	19.8	21.0	1.9	26.0	26.3	26.4	26.6	26.8	27.0	27.4
6400.00	22.8	-30.5	-9.7	-15.7	1.											

TEST CONDITIONS: $V_{DD} = +6.0$ V, $V_{EN} = +6.0$ V, $I_{DD} = 104$ mA, $I_{EN} = 2.60$ mA @ Temperature = $+25^\circ\text{C}$

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	46.2	46.1	46.0	46.0	45.9	45.7	45.5
1000.0	45.2	45.0	45.0	44.9	44.7	44.5	44.1
2000.0	42.5	42.2	42.2	42.0	41.8	41.7	41.5
4000.0	45.1	45.0	44.9	44.6	44.4	44.2	44.2
6000.0	34.1	34.0	33.8	33.5	33.2	33.1	32.8
8000.0	38.8	38.5	38.1	38.0	38.3	39.3	41.2

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +6.0$ V, $V_{EN} = +6.0$ V, $I_{DD} = 110$ mA, $I_{EN} = 2.58$ mA @ Temperature = $+25^\circ\text{C}$

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure (dBm)										
5500.00	22.2	-30.0	-10.3	-9.9	1.4	0.8	21.1	23.4	1.6	28.7	28.4	28.8	29.1	29.3	29.6	
5600.00	22.4	-30.1	-10.1	-10.0	1.3	0.8	20.8	23.2	1.6	27.4	27.3	27.8	28.0	28.3	28.4	
5700.00	22.3	-30.0	-10.5	-10.2	1.4	0.8	20.6	23.0	1.6	27.4	27.2	27.8	28.1	28.4	28.6	
5800.00	22.5	-30.1	-10.2	-10.2	1.3	0.8	20.4	23.0	1.6	27.1	27.5	27.3	27.8	28.2	28.4	
5900.00	22.5	-30.1	-10.6	-10.5	1.4	0.8	19.7	22.2	1.6	27.1	26.9	27.2	27.2	27.4	27.7	
6000.00	22.6	-30.2	-10.2	-10.4	1.4	0.8	19.6	21.7	1.6	25.6	25.4	25.8	26.0	26.1	26.2	
6100.00	22.6	-30.2	-10.6	-10.7	1.4	0.8	19.9	21.9	1.6	26.5	26.2	26.4	26.5	26.7	27.0	
6200.00	22.7	-30.3	-10.2	-10.6	1.4	0.8	20.1	21.9	1.6	25.8	25.2	25.9	26.1	26.4	26.6	
6300.00	22.7	-30.3	-10.6	-10.9	1.4	0.8	20.7	22.4	1.6	26.5	26.6	26.7	26.8	27.1	27.5	
6400.00	22.8	-30.6	-10.2	-10.7	1.4	0.8	20.9	22.5	1.6	26.1	26.0	26.6	26.8	27.0	27.5	
6500.00	22.8	-30.5	-10.5	-11.1	1.4	0.8	21.0	22.4	1.6	27.0	26.0	26.4	26.8	27.1	27.5	
6600.00	22.9	-30.9	-10.2	-11.0	1.4	0.8	20.9	22.1	1.6	26.6	26.5	26.7	26.8	27.2	27.6	
6700.00	22.9	-30.9	-10.6	-11.4	1.4	0.8	20.7	21.9	1.7	26.0	26.2	26.4	26.7	27.0	27.5	
6800.00	23.0	-31.2	-10.4	-11.3	1.4	0.8	20.9	22.0	1.7	26.3	26.5	26.6	27.0	27.3	27.8	
6900.00	23.0	-31.2	-10.8	-11.8	1.5	0.8	21.2	22.4	1.7	26.5	26.3	26.8	26.9	27.3	28.5	
7000.00	23.0	-31.5	-10.5	-11.7	1.5	0.8	21.2	22.3	1.8	26.1	25.8	26.2	26.5	26.9	27.4	
7100.00	23.0	-31.6	-11.0	-12.4	1.5	0.9	21.2	22.2	1.8	25.8	26.2	26.6	26.8	27.1	27.6	
7200.00	23.0	-32.0	-10.8	-12.4	1.6	0.9	21.3	22.2	1.8	26.8	26.1	26.3	26.6	27.0	27.5	
7300.00	22.9	-32.1	-11.3	-13.1	1.6	0.9	21.4	22.2	1.8	25.2	25.4	25.8	26.2	26.6	27.9	
7400.00	22.9	-32.7	-11.0	-13.2	1.7	0.9	21.2	22.2	1.9	25.8	25.5	26.0	26.2	26.6	27.9	
7500.00	22.8	-32.8	-11.5	-14.3	1.7	0.9	20.9	21.9	2.0	25.5	25.7	25.8	26.2	26.7	28.0	
7600.00	22.7	-33.6	-10.8	-14.4	1.9	0.9	21.1	22.0	2.0	25.5	25.7	25.8	26.2	26.6	27.2	
7700.00	22.5	-33.9	-11.1	-16.0	2.0	1.0	21.0	21.7	2.1	24.3	24.4	24.8	25.1	25.5	26.2	
7800.00	22.3	-34.9	-10.0	-16.1	2.2	1.0	20.7	21.5	2.2	25.0	24.6	25.5	25.7	26.2	26.8	
7900.00	21.9	-35.3	-10.0	-18.3	2.4	1.0	20.5	21.2	2.3	25.8	25.2	25.3	25.6	26.0	26.7	
8000.00	21.5	-36.7	-8.6	-17.4	2.8	1.1	20.0	20.7	2.5	24.5	24.2	24.6	25.1	25.6	26.4	
8100.00	21.0	-37.2	-8.3	-18.5	3.0	1.1	20.0	20.6	2.5	24.1	24.3	24.5	25.0	25.5	26.2	
8200.00	20.2	-39.2	-6.8	-15.6	3.7	1.2	19.9	20.4	2.7	23.5	23.9	24.4	24.9	25.9	27.1	
8300.00	19.7	-39.1	-6.4	-14.9	3.8	1.2	19.6	20.2	2.8	24.0	23.8	24.2	24.6	25.2	26.1	
8400.00	18.5	-42.1	-5.2	-11.9	5.3	1.2	19.0	19.7	3.0	24.0	23.9	24.3	24.5	25.2	26.2	
8500.00	17.9	-42.1	-4.8	-10.9	5.3	1.2	18.4	19.1	3.2	22.7	22.3	23.1	23.6	24.5	25.7	

FREQ (MHz)	IP-2 Output Pout = -2	IP-2 Output Pout = +0	IP-2 Output Pout = +2	IP-2 Output Pout = +4	IP-2 Output Pout = +6	IP-2 Output Pout = +8	IP-2 Output Pout = +10
	(dBm)						
5500.0	38.6	38.5	38.4	38.3	38.1	38.0	37.9
6000.0	34.5	34.4	34.3	34.1	33.9	33.7	33.6
7000.0	44.1	43.9	43.8	43.6	43.5	43.4	43.4
8000.0	52.3	52.1	52.0	51.8	51.6	51.5	51.5
8500.0	60.7	60.5	60.3	60.1	60.0	59.9	60.3

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +6.0$ V, $V_{EN} = 0$ V, $I_{DD} = 4$ mA, $I_{EN} = 0$ mA @ Temperature = $+25^\circ\text{C}$

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	K	Stability Measure	Noise Figure (dB)
200.00	-3.7	-3.8	-4.0	-8.9	1.1	0.9	3.5
300.00	-2.4	-2.4	-6.6	-11.7	1.0	0.7	2.2
400.00	-1.7	-1.8	-9.2	-13.9	1.0	0.6	1.6
500.00	-1.4	-1.5	-11.9	-15.6	1.0	0.5	1.1
600.00	-1.3	-1.3	-14.8	-16.9	1.0	0.5	1.4
700.00	-1.2	-1.3	-18.1	-17.8	1.0	0.4	1.1
800.00	-1.2	-1.2	-22.0	-18.1	1.0	0.4	1.4
900.00	-1.2	-1.2	-27.2	-17.8	1.0	0.4	1.3
1000.00	-1.1	-1.2	-31.3	-17.4	1.0	0.4	1.2
1100.00	-1.1	-1.2	-27.0	-17.1	1.0	0.4	1.4
1200.00	-1.1	-1.2	-23.2	-16.8	1.0	0.4	1.2
1300.00	-1.2	-1.3	-20.7	-16.4	1.0	0.4	1.1
1400.00	-1.2	-1.3	-18.8	-15.9	1.0	0.4	1.1
1500.00	-1.2	-1.3	-17.4	-15.5	1.0	0.4	1.5
1600.00	-1.3	-1.4	-16.3	-15.4	1.0	0.5	1.2
1700.00	-1.3	-1.4	-15.5	-15.4	1.0	0.5	1.3
1800.00	-1.3	-1.5	-14.8	-15.3	1.0	0.5	1.6
1900.00	-1.4	-1.5	-14.3	-15.1	1.0	0.5	1.5
2000.00	-1.4	-1.6	-13.9	-15.0	1.0	0.5	1.5
2100.00	-1.4	-1.6	-13.6	-15.3	1.0	0.5	1.6
2200.00	-1.4	-1.6	-13.4	-15.5	1.0	0.5	1.4
2300.00	-1.5	-1.7	-13.3	-15.8	1.0	0.5	1.5
2400.00	-1.5	-1.7	-13.2	-16.1	1.0	0.6	1.6
2500.00	-1.5	-1.8	-13.2	-16.6	1.0	0.6	1.6
2600.00	-1.5	-1.8	-13.2	-17.3	1.1	0.6	1.6
2700.00	-1.6	-1.9	-13.4	-18.1	1.1	0.6	2.0
2800.00	-1.6	-2.0	-13.5	-18.9	1.1	0.6	2.0
2900.00	-1.6	-2.0	-13.7	-19.7	1.1	0.6	2.1
3000.00	-1.6	-2.0	-13.8	-20.8	1.1	0.6	1.9
3100.00	-1.6	-2.0	-13.9	-22.4	1.1	0.6	1.9
3200.00	-1.6	-2.0	-14.0	-24.2	1.1	0.6	2.2
3300.00	-1.6	-2.0	-14.0	-25.9	1.1	0.6	2.0
3400.00	-1.7	-2.0	-14.1	-27.8	1.1	0.6	2.3
3500.00	-1.7	-2.0	-14.1	-28.8	1.1	0.6	2.1
3600.00	-1.7	-2.0	-14.0	-26.8	1.1	0.6	2.2
3700.00	-1.7	-2.0	-13.9	-24.4	1.1	0.6	2.3
3800.00	-1.7	-2.0	-13.7	-22.3	1.1	0.6	2.2
3900.00	-1.7	-2.0	-13.5	-20.7	1.1	0.6	2.0
4000.00	-1.7	-2.0	-13.3	-19.1	1.1	0.6	2.1
4100.00	-1.8	-2.1	-13.0	-17.6	1.1	0.6	2.0
4200.00	-1.8	-2.1	-12.7	-16.6	1.1	0.6	2.1
4300.00	-1.8	-2.1	-12.5	-15.7	1.1	0.6	2.1
4400.00	-1.8	-2.1	-12.2	-15.0	1.1	0.6	2.1
4500.00	-1.8	-2.2	-11.9	-14.2	1.1	0.6	1.7
4600.00	-1.9	-2.2	-11.7	-13.6	1.1	0.6	2.0
4700.00	-1.9	-2.2	-11.5	-13.1	1.1	0.6	2.0
4800.00	-1.9	-2.3	-11.4	-12.8	1.1	0.6	2.2
4900.00	-1.9	-2.3	-11.2	-12.5	1.1	0.6	2.2
5000.00	-1.9	-2.3	-11.1	-12.1	1.1	0.6	2.1
5100.00	-1.9	-2.4	-11.0	-11.9	1.1	0.6	1.6
5200.00	-1.9	-2.4	-10.9	-11.7	1.1	0.6	1.3
5300.00	-1.9	-2.4	-10.9	-11.6	1.1	0.6	2.4
5400.00	-1.9	-2.4	-10.9	-11.5	1.1	0.6	1.7
5500.00	-1.9	-2.4	-10.9	-11.3	1.1	0.6	2.3
5600.00	-1.9	-2.4	-11.1	-11.4	1.1	0.6	2.4
5700.00	-1.9	-2.4	-11.1	-11.4	1.1	0.6	2.3
5800.00	-1.8	-2.4	-11.3	-11.3	1.1	0.6	2.3
5900.00	-1.8	-2.4	-11.6	-11.6	1.1	0.6	2.3
6000.00	-1.8	-2.4	-11.7	-11.5	1.1	0.6	2.6
6100.00	-1.7	-2.3	-12.0	-11.7	1.1	0.6	1.8
6200.00	-1.7	-2.3	-12.4	-11.9	1.1	0.6	2.3
6300.00	-1.7	-2.3	-12.6	-12.0	1.1	0.6	2.1
6400.00	-1.7	-2.3	-13.0	-12.3	1.1	0.6	2.1
6500.00	-1.7	-2.3	-13.2	-12.3	1.1	0.6	2.1
6600.00	-1.7	-2.3	-13.4	-12.4	1.1	0.6	2.0
6700.00	-1.6	-2.3	-13.9	-12.7	1.1	0.6	1.5
6800.00	-1.7	-2.3	-14.0	-12.8	1.1	0.6	1.7
6900.00	-1.6	-2.3	-14.1	-12.7	1.1	0.6	2.4
7000.00	-1.7	-2.3	-14.2	-12.8	1.1	0.6	2.1
7100.00	-1.7	-2.4	-14.1	-12.8	1.1	0.6	2.4
7200.00	-1.7	-2.4	-14.0	-12.7	1.1	0.6	2.7
7300.00	-1.8	-2.4	-13.8	-12.6	1.1	0.6	2.0
7400.00	-1.8	-2.5	-13.3	-12.1	1.1	0.6	2.2
7500.00	-1.9	-2.5	-12.8	-12.0	1.1	0.6	2.6
7600.00	-2.0	-2.7	-12.4	-11.7	1.1	0.6	1.9
7700.00	-2.1	-2.7	-11.7	-11.1	1.1	0.6	2.9
7800.00	-2.2	-2.8	-11.2	-10.7	1.1	0.6	2.0
7900.00	-2.4	-3.0	-10.7	-10.1	1.2	0.6	3.1
8000.00	-2.4	-3.0	-9.8	-9.5	1.1	0.6	2.8

TEST CONDITIONS: $V_{DD} = +6.0$ V, $V_{EN} = 0$ V, $I_{DD} = 4$ mA, $I_{EN} = 0$ mA @ Temperature = $+25^\circ\text{C}$

FREQ (MHz)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
400.0	37.2	35.8	33.3	29.5	24.6	18.2	16.4
1000.0	41.4	39.2	36.1	31.6	25.4	17.0	15.4
2000.0	41.5	41.6	39.8	36.7	32.1	25.1	17.9
4000.0	42.1	41.7	41.7	40.7	38.2	34.2	26.6
6000.0	42.6	43.1	42.3	40.2	36.3	30.5	21.1
8000.0	42.0	41.8	42.2	40.5	36.9	31.2	21.0

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	70.8	70.5	70.0	69.1	65.8	55.8	46.4
1000.0	70.9	71.0	71.1	70.9	67.6	53.1	61.3
2000.0	70.3	70.2	70.2	70.1	69.5	65.5	54.6
4000.0	74.3	74.2	74.2	74.3	74.6	75.1	74.5
6000.0	74.2	74.0	73.8	73.5	73.0	72.0	65.1
8000.0	84.2	84.2	84.2	84.1	83.9	83.1	78.5

FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
400.0	13.9	10.8
1000.0	12.9	10.4
2000.0	14.9	12.0
4000.0	17.1	13.4
6000.0	17.8	14.1
8000.0	17.8	13.1

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +6.0 V, V_{EN} = 0 V, I_{DD} = 4 mA, I_{EN} = 0 mA @ Temperature = +25°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)	FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
					K	Measure				
5500.00	-1.7	-2.3	-20.0	-17.8	1.1	0.7	2.4	5500.0	16.7	13.5
5600.00	-1.7	-2.3	-20.5	-17.7	1.1	0.7	2.2	6000.0	18.6	14.4
5700.00	-1.7	-2.3	-20.4	-17.4	1.1	0.7	2.1	7000.0	20.0	15.3
5800.00	-1.6	-2.3	-19.9	-16.8	1.1	0.7	2.2	8000.0	19.7	13.6
5900.00	-1.6	-2.3	-18.9	-16.2	1.1	0.7	2.3	8500.0	18.8	12.5
6000.00	-1.6	-2.3	-18.2	-15.5	1.1	0.7	2.2			
6100.00	-1.6	-2.4	-17.0	-14.7	1.1	0.6	2.1			
6200.00	-1.7	-2.4	-16.2	-14.1	1.1	0.6	2.5			
6300.00	-1.7	-2.4	-15.2	-13.4	1.1	0.6	2.5			
6400.00	-1.7	-2.5	-14.5	-12.8	1.1	0.6	2.0			
6500.00	-1.8	-2.5	-13.6	-12.2	1.1	0.6	2.3			
6600.00	-1.8	-2.6	-12.9	-11.7	1.1	0.6	2.0			
6700.00	-1.9	-2.7	-12.1	-11.1	1.1	0.6	2.4			
6800.00	-1.9	-2.7	-11.5	-10.6	1.1	0.6	2.3			
6900.00	-2.0	-2.8	-10.8	-10.0	1.1	0.6	2.7			
7000.00	-2.1	-2.9	-10.2	-9.6	1.1	0.6	2.6			
7100.00	-2.2	-3.0	-9.6	-9.1	1.1	0.6	2.0			
7200.00	-2.3	-3.1	-9.1	-8.7	1.1	0.6	2.5			
7300.00	-2.5	-3.2	-8.5	-8.1	1.1	0.6	2.6			
7400.00	-2.6	-3.4	-8.0	-7.8	1.1	0.6	2.4			
7500.00	-2.7	-3.5	-7.5	-7.3	1.1	0.6	2.7			
7600.00	-2.9	-3.7	-7.1	-7.0	1.1	0.6	2.4			
7700.00	-3.1	-3.8	-6.6	-6.5	1.1	0.6	2.7			
7800.00	-3.3	-4.0	-6.2	-6.2	1.1	0.6	3.2			
7900.00	-3.5	-4.2	-5.8	-5.8	1.2	0.6	3.2			
8000.00	-3.6	-4.4	-5.5	-5.6	1.2	0.6	3.5			
8100.00	-3.9	-4.6	-5.1	-5.2	1.2	0.6	3.1			
8200.00	-4.1	-4.8	-4.9	-5.0	1.2	0.6	3.2			
8300.00	-4.3	-5.0	-4.5	-4.7	1.2	0.6	2.7			
8400.00	-4.5	-5.2	-4.3	-4.6	1.2	0.6	2.8			
8500.00	-4.6	-5.3	-4.0	-4.2	1.2	0.6	2.9			

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)	
5500.0	70.5	70.5	70.3	70.1	69.7	68.6	64.2	40.8	41.3	41.5	40.8	39.4	35.9	29.9	
6000.0	77.4	77.2	76.9	76.7	76.3	75.9	74.2	40.2	40.7	41.0	41.5	39.0	34.3	25.9	
7000.0	88.8	88.7	88.5	88.3	87.9	87.3	85.6	40.0	40.3	40.6	40.8	38.2	33.8	27.7	
8000.0	84.3	84.3	84.2	84.2	84.0	83.6	81.9	43.3	42.0	42.5	43.4	39.8	39.5	37.1	31.7
8500.0	91.5	91.4	91.4	91.3	91.2	92.6	94.8	42.5	43.0	39.8	34.7	26.8	26.8	17.4	



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +6.25 V, V_{EN} = +6.25 V, I_{DD} = 111 mA, I_{EN} = 2.71 mA @ Temperature = +25°C

FREQ (GHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure										
200.00	15.5	-33.8	-1.9	-4.4	1.4	0.9	22.1	23.2	4.7	32.5	34.9	35.5	35.8	36.4	35.7	35.6
300.00	20.4	-28.8	-6.0	-8.6	1.2	0.8	22.4	23.4	2.5	32.2	33.4	35.2	36.7	36.2	36.3	35.8
400.00	21.9	-27.3	-12.5	-14.3	1.2	0.7	22.8	23.7	1.9	32.5	34.0	41.1	37.7	37.7	37.4	37.3
500.00	22.2	-27.0	-17.5	-15.9	1.1	0.6	23.0	23.8	1.7	33.3	35.1	37.0	37.8	37.5	37.4	37.6
600.00	22.2	-27.0	-16.7	-14.8	1.1	0.6	23.2	23.8	1.5	31.9	38.2	38.0	37.5	38.1	38.4	38.2
700.00	22.2	-27.1	-15.0	-14.0	1.1	0.6	23.4	24.0	1.4	33.5	36.1	37.1	37.8	37.3	37.4	37.4
800.00	22.2	-27.0	-14.1	-13.6	1.1	0.6	23.4	24.1	1.4	35.9	37.8	37.7	38.1	38.0	38.1	38.2
900.00	22.2	-27.1	-13.7	-13.5	1.1	0.6	23.5	24.2	1.4	35.2	35.1	37.2	37.5	38.0	37.9	38.0
1000.00	22.2	-27.2	-13.5	-13.6	1.1	0.6	23.5	24.2	1.4	36.1	36.0	36.1	37.0	38.1	37.7	37.8
1100.00	22.2	-27.1	-13.6	-13.9	1.1	0.6	23.4	24.2	1.4	36.8	37.6	36.6	37.4	37.4	37.5	37.7
1200.00	22.2	-27.2	-13.8	-14.4	1.1	0.7	23.5	24.3	1.4	34.7	33.9	35.4	37.3	37.0	37.0	37.2
1300.00	22.2	-27.2	-14.1	-15.0	1.1	0.7	23.5	24.4	1.4	35.4	34.3	35.7	36.5	36.4	36.6	36.8
1400.00	22.3	-27.2	-14.5	-15.7	1.1	0.7	23.4	24.2	1.4	34.0	34.9	36.1	36.4	36.6	36.5	36.8
1500.00	22.3	-27.2	-15.0	-16.7	1.1	0.7	23.4	24.4	1.4	34.5	35.0	35.2	35.7	36.0	36.1	36.0
1600.00	22.3	-27.3	-15.4	-17.8	1.2	0.7	23.4	24.4	1.5	33.0	34.4	34.8	35.2	35.5	35.9	35.9
1700.00	22.3	-27.3	-15.6	-18.8	1.2	0.7	23.5	24.5	1.5	33.8	35.2	34.8	35.3	35.6	35.8	36.0
1800.00	22.4	-27.4	-16.1	-20.5	1.2	0.7	23.3	24.4	1.5	34.4	33.7	33.9	34.9	35.3	35.6	35.7
1900.00	22.4	-27.4	-16.4	-22.5	1.2	0.7	23.3	24.4	1.5	32.4	34.8	34.6	34.4	34.9	35.1	35.3
2000.00	22.4	-27.4	-16.5	-24.9	1.2	0.7	23.2	24.3	1.5	34.1	34.8	35.2	34.9	35.3	35.6	35.6
2100.00	22.4	-27.5	-16.4	-27.3	1.2	0.7	23.4	24.5	1.6	30.8	32.0	34.6	34.4	34.9	35.1	35.2
2200.00	22.4	-27.5	-16.1	-28.6	1.2	0.7	23.2	24.5	1.6	32.1	34.2	33.4	34.1	34.6	34.9	35.3
2300.00	22.4	-27.6	-15.8	-27.3	1.2	0.7	23.2	24.6	1.6	32.6	34.6	33.5	33.9	34.6	34.8	35.1
2400.00	22.4	-27.7	-15.3	-25.2	1.2	0.7	23.0	24.7	1.6	32.2	31.6	32.8	32.9	33.4	33.4	33.4
2500.00	22.4	-27.7	-14.9	-23.4	1.2	0.7	22.8	24.7	1.6	31.2	33.5	33.1	32.8	33.1	33.2	33.3
2600.00	22.4	-27.8	-14.4	-21.7	1.2	0.7	22.6	24.6	1.7	29.7	33.2	33.5	32.9	33.2	33.3	33.4
2700.00	22.4	-27.9	-13.9	-20.4	1.2	0.8	22.2	24.2	1.8	33.7	31.6	33.2	33.2	32.9	33.3	33.4
2800.00	22.4	-28.1	-13.4	-19.1	1.2	0.8	22.1	24.1	1.8	30.3	31.7	31.9	32.3	32.4	32.8	32.8
2900.00	22.4	-28.1	-12.8	-18.0	1.2	0.8	21.9	23.9	1.8	31.3	32.5	32.9	32.8	33.1	33.2	33.2
3000.00	22.3	-28.2	-12.4	-17.1	1.2	0.8	22.0	24.0	1.8	29.5	30.8	31.5	31.6	31.7	31.7	31.8
3100.00	22.3	-28.1	-12.0	-16.5	1.2	0.8	22.0	24.1	1.8	31.2	30.2	31.2	31.5	31.6	31.6	31.7
3200.00	22.3	-28.3	-11.6	-16.1	1.2	0.8	22.0	24.2	1.8	32.5	31.2	31.7	31.8	31.9	32.1	32.2
3300.00	22.3	-28.2	-11.4	-15.8	1.2	0.8	21.9	24.1	1.8	30.3	31.3	31.1	31.7	31.5	31.7	31.8
3400.00	22.3	-28.3	-11.2	-15.6	1.2	0.8	21.8	24.0	1.8	31.5	30.8	31.1	31.6	31.8	32.0	32.1
3500.00	22.3	-28.4	-11.1	-15.5	1.2	0.8	21.9	24.0	1.8	30.3	31.4	31.3	31.0	31.4	31.6	31.6
3600.00	22.3	-28.4	-11.1	-15.7	1.2	0.8	21.8	23.9	1.7	30.7	30.3	31.0	31.2	31.3	31.5	31.7
3700.00	22.4	-28.4	-11.0	-15.8	1.2	0.8	22.0	24.1	1.7	30.4	30.8	31.5	31.7	32.0	32.2	32.5
3800.00	22.4	-28.4	-11.1	-16.0	1.2	0.8	22.2	24.2	1.7	29.8	30.5	30.8	31.1	31.5	31.8	32.1
3900.00	22.4	-28.5	-11.2	-16.3	1.2	0.8	22.3	24.2	1.7	29.7	31.0	30.6	31.2	31.3	31.6	31.9
4000.00	22.5	-28.5	-11.4	-16.8	1.2	0.8	22.5	24.4	1.7	31.0	30.0	30.7	31.2	31.4	31.6	32.0
4100.00	22.5	-28.5	-11.6	-17.4	1.2	0.8	22.6	24.4	1.7	30.1	30.4	30.5	30.5	30.9	31.1	31.4
4200.00	22.5	-28.6	-11.9	-18.2	1.2	0.8	22.6	24.4	1.7	29.4	30.0	30.6	30.7	30.9	31.3	31.6
4300.00	22.6	-28.7	-12.1	-18.6	1.2	0.8	22.6	24.3	1.7	30.3	30.4	31.3	30.8	31.0	31.3	31.7
4400.00	22.6	-28.6	-12.7	-19.6	1.2	0.8	22.6	24.4	1.7	29.6	29.9	30.4	30.7	30.9	31.2	31.6
4500.00	22.7	-28.7	-12.9	-20.6	1.2	0.8	22.4	24.3	1.7	30.0	30.1	30.6	30.5	30.8	31.1	31.3
4600.00	22.7	-28.8	-13.6	-21.7	1.2	0.8	22.1	24.1	1.6	29.5	29.8	30.4	30.3	30.5	30.9	31.1
4700.00	22.8	-28.7	-14.2	-23.3	1.2	0.8	22.2	24.2	1.7	30.2	29.6	29.8	30.1	30.5	30.8	31.1
4800.00	22.8	-28.8	-14.6	-23.9	1.2	0.8	22.2	24.2	1.6	29.4	29.4	30.0	30.2	30.6	30.9	31.3
4900.00	22.8	-29.0	-15.7	-25.3	1.3	0.8	21.9	23.9	1.6	29.7	28.9	29.4	29.6	29.9	30.2	30.5
5000.00	22.9	-28.9	-16.2	-27.7	1.3	0.8	21.9	23.8	1.8	29.3	29.2	29.1	29.3	29.5	29.8	30.1
5100.00	23.0	-29.0	-16.9	-28.1	1.3	0.8	22.2	23.9	1.7	28.9	28.4	28.6	29.1	29.4	29.8	30.2
5200.00	23.0	-29.1	-18.3	-30.3	1.3	0.8	22.3	23.9	1.7	28.9	28.3	29.0	29.2	29.6	29.9	30.5
5300.00	23.1	-29.1	-18.4	-30.2	1.3	0.8	22.2	23.8	1.7	28.5	28.8	29.1	29.3	29.7	30.1	30.6
5400.00	23.1	-29.3	-19.2	-29.8	1.3	0.8	21.8	23.7	1.7	27.4	28.4	28.5	28.7	29.2	29.6	30.0
5500.00	23.1	-29.2	-19.8	-33.3	1.3	0.8	21.5	23.5	1.8	27.9	27.5	28.2	28.4	28.8	29.1	29.5
5600.00	23.2	-29.3	-18.3	-28.8	1.3	0.8	20.8	23.1	1.8	27.8	28.2	28.1	28.5	28.8	29.1	29.3
5700.00	23.0	-29.6	-18.2	-27.7	1.3	0.8	20.6	22.8	1.8	28.8	28.1	28.2	28.4	28.7	29.0	29.3
5800.00	23.2	-29.4	-17.3	-27.4	1.3	0.8	20.5	22.5	1.8	27.2	27.8	27.6	27.9	28.2	28.5	28.8
5900.00	23.2	-29.7	-15.1	-23.5	1.3	0.8	20.4	22.3	1.8	27.4	27.8	28.0	27.9	28.1	28.4	28.6
6000.00	23.0	-29.7	-14.9	-23.5	1.3	0.8	20.1	21.6	2.0	27.4	27.0	27.1	27.2	27.5	27.7	27.8
6100.00	23.2	-29.8	-13.2	-21.1	1.3	0.8	20.1	21.4	1.8	27.2	26.6	27.0	27.3	27.4	27.7	27.9
6200.00	23.0	-30.3	-11.6	-18.4	1.4	0.9	20.1	21.2	1.9	27.2	26.5	26.7	26.8	27.0	27.3	27.6
6300.00	22.9	-30.2	-11.2	-17.9	1.4	0.9	20.0	21.1	1.9	26.0	26.4	26.7	26.8	27.1	27.4	27.8
6400.00	23.0	-30.5	-9.7	-15.8												

TEST CONDITIONS: $V_{DD} = +6.25$ V, $V_{EN} = +6.25$ V, $I_{DD} = 111$ mA, $I_{EN} = 2.71$ mA @ Temperature = +25°C

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	47.5	47.4	47.4	47.3	47.2	47.1	46.8
1000.0	46.4	46.3	46.1	46.0	45.8	45.6	45.3
2000.0	43.1	42.9	42.8	42.7	42.6	42.5	42.3
4000.0	45.0	44.8	44.8	44.6	44.4	44.3	44.3
6000.0	34.0	33.8	33.7	33.5	33.2	33.1	32.9
8000.0	39.1	38.8	38.5	38.3	38.6	39.6	41.4

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +6.25 V, V_{EN} = +6.25 V, I_{DD} = 118 mA, I_{EN} = 2.68 mA @ Temperature = +25°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure (dBm)										
5500.00	22.3	-29.9	-10.3	-10.0	1.3	0.8	21.1	23.3	1.6	27.6	28.8	29.2	29.5	29.9	30.2	
5600.00	22.5	-30.1	-10.1	-10.1	1.3	0.8	20.9	23.2	1.6	28.0	27.8	28.1	28.4	28.8	29.1	
5700.00	22.4	-30.0	-10.5	-10.3	1.3	0.8	20.4	23.0	1.6	27.2	28.3	28.0	28.2	28.5	28.9	
5800.00	22.6	-30.1	-10.2	-10.3	1.3	0.8	20.4	22.9	1.6	27.2	28.3	27.7	28.0	28.3	29.0	
5900.00	22.6	-30.2	-10.6	-10.5	1.4	0.8	19.8	22.0	1.6	26.8	26.9	27.3	27.5	27.8	28.3	
6000.00	22.7	-30.1	-10.2	-10.4	1.3	0.8	19.8	21.6	1.6	26.2	26.1	26.2	26.3	26.5	26.8	
6100.00	22.7	-30.1	-10.6	-10.8	1.3	0.8	20.0	21.8	1.6	26.1	26.3	26.4	26.8	27.1	27.4	
6200.00	22.8	-30.3	-10.2	-10.6	1.3	0.8	20.1	21.7	1.6	25.9	26.1	26.2	26.4	26.7	27.1	
6300.00	22.8	-30.2	-10.5	-10.9	1.3	0.8	20.7	22.2	1.6	26.7	26.9	27.0	27.3	27.8	28.3	
6400.00	22.9	-30.6	-10.1	-10.7	1.4	0.8	21.0	22.4	1.6	26.7	26.8	27.0	27.3	27.8	28.4	
6500.00	22.9	-30.5	-10.5	-11.1	1.4	0.8	21.1	22.3	1.7	26.3	27.3	26.8	27.0	27.4	27.8	
6600.00	23.0	-30.8	-10.2	-10.8	1.4	0.8	20.9	22.1	1.6	26.1	26.5	26.6	27.0	27.4	27.9	
6700.00	23.0	-30.9	-10.6	-11.3	1.4	0.8	20.7	22.0	1.7	26.3	26.8	26.6	26.9	27.3	28.5	
6800.00	23.1	-31.1	-10.3	-11.2	1.4	0.8	20.9	22.2	1.7	26.7	26.7	27.0	27.5	28.1	28.7	
6900.00	23.1	-31.1	-10.7	-11.6	1.4	0.8	21.3	22.6	1.7	26.1	26.2	26.7	27.1	27.5	28.1	
7000.00	23.1	-31.4	-10.4	-11.6	1.5	0.8	21.1	22.4	1.7	25.5	26.2	26.4	26.7	27.1	28.5	
7100.00	23.1	-31.7	-11.0	-12.2	1.5	0.9	21.2	22.3	1.8	25.5	26.3	26.6	26.9	27.4	27.9	
7200.00	23.1	-32.0	-10.7	-12.1	1.5	0.9	21.3	22.3	1.8	26.1	25.9	26.4	26.6	27.2	27.8	
7300.00	23.0	-32.2	-11.3	-12.9	1.6	0.9	21.1	22.3	1.9	25.5	26.0	26.1	26.3	26.8	28.2	
7400.00	23.1	-32.7	-10.9	-12.9	1.7	0.9	21.1	22.2	1.9	25.4	25.7	26.0	26.3	26.8	28.3	
7500.00	22.9	-32.9	-11.4	-14.0	1.7	0.9	20.6	22.0	2.0	25.8	25.7	25.9	26.4	26.8	27.5	
7600.00	22.8	-33.6	-10.7	-14.1	1.9	0.9	21.0	22.0	2.0	25.5	25.8	26.0	26.3	26.8	28.2	
7700.00	22.6	-33.9	-11.0	-15.7	2.0	1.0	20.9	21.7	2.1	24.2	24.6	24.9	25.3	25.7	26.4	
7800.00	22.4	-35.0	-9.9	-15.8	2.2	1.0	20.6	21.5	2.2	25.0	25.1	25.5	25.8	26.3	27.0	
7900.00	22.0	-35.4	-9.9	-17.9	2.4	1.0	20.4	21.2	2.3	24.7	25.1	25.3	25.6	26.1	26.9	
8000.00	21.6	-36.9	-8.5	-17.2	2.8	1.1	19.7	20.8	2.4	23.9	24.1	24.9	25.2	25.8	26.6	
8100.00	21.1	-37.2	-8.2	-18.5	3.0	1.1	19.8	20.6	2.5	24.1	24.1	24.6	25.1	25.7	26.5	
8200.00	20.3	-39.6	-6.7	-15.7	3.8	1.2	19.7	20.4	2.7	23.2	23.9	24.4	25.1	26.0	27.4	
8300.00	19.8	-39.3	-6.4	-15.0	3.8	1.2	19.6	20.1	2.8	23.4	23.8	24.2	24.7	25.3	26.3	
8400.00	18.5	-42.4	-5.1	-12.0	5.4	1.2	19.0	19.5	3.0	24.2	23.9	24.3	24.7	25.3	26.4	
8500.00	17.9	-42.3	-4.7	-11.0	5.4	1.2	18.4	18.9	3.2	22.5	22.7	23.2	23.7	24.6	26.1	

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
5500.0	38.5	38.5	38.4	38.4	38.2	38.2	38.2
6000.0	34.4	34.3	34.2	34.1	33.9	33.8	33.8
7000.0	43.9	43.8	43.7	43.5	43.5	43.4	43.5
8000.0	52.2	52.1	51.9	51.8	51.7	51.7	51.7
8500.0	60.6	60.4	60.3	60.2	60.0	60.1	60.5



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +6.25\text{ V}$, $V_{EN} = 0\text{ V}$, $I_{DD} = 4\text{ mA}$, $I_{EN} = 0\text{ mA}$ @ Temperature = $+25^\circ\text{C}$

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)
					K	Measure	
200.00	-3.7	-3.8	-4.0	-8.9	1.1	0.9	3.4
300.00	-2.4	-2.4	-6.6	-11.7	1.0	0.7	2.0
400.00	-1.7	-1.8	-9.2	-13.9	1.0	0.6	1.6
500.00	-1.4	-1.5	-11.9	-15.6	1.0	0.5	1.4
600.00	-1.3	-1.3	-14.8	-16.9	1.0	0.5	1.3
700.00	-1.2	-1.3	-18.0	-17.8	1.0	0.4	1.1
800.00	-1.2	-1.3	-22.0	-18.0	1.0	0.4	1.4
900.00	-1.2	-1.2	-27.1	-17.8	1.0	0.4	1.3
1000.00	-1.1	-1.2	-31.2	-17.4	1.0	0.4	1.1
1100.00	-1.1	-1.2	-26.9	-17.1	1.0	0.4	1.3
1200.00	-1.1	-1.2	-23.2	-16.8	1.0	0.4	1.2
1300.00	-1.2	-1.3	-20.7	-16.4	1.0	0.4	1.2
1400.00	-1.2	-1.3	-18.8	-15.9	1.0	0.4	1.2
1500.00	-1.2	-1.3	-17.4	-15.5	1.0	0.4	1.4
1600.00	-1.3	-1.4	-16.3	-15.4	1.0	0.5	1.4
1700.00	-1.3	-1.4	-15.5	-15.4	1.0	0.5	1.4
1800.00	-1.3	-1.5	-14.8	-15.3	1.0	0.5	1.5
1900.00	-1.4	-1.5	-14.3	-15.1	1.0	0.5	1.3
2000.00	-1.4	-1.6	-13.9	-15.0	1.0	0.5	1.6
2100.00	-1.4	-1.6	-13.6	-15.2	1.0	0.5	1.2
2200.00	-1.4	-1.6	-13.4	-15.5	1.0	0.5	1.7
2300.00	-1.5	-1.7	-13.3	-15.8	1.0	0.5	1.7
2400.00	-1.5	-1.7	-13.2	-16.1	1.0	0.6	1.8
2500.00	-1.5	-1.8	-13.2	-16.6	1.0	0.6	1.9
2600.00	-1.5	-1.8	-13.2	-17.3	1.1	0.6	2.0
2700.00	-1.6	-1.9	-13.4	-18.1	1.1	0.6	1.9
2800.00	-1.6	-2.0	-13.5	-18.9	1.1	0.6	2.4
2900.00	-1.6	-2.0	-13.7	-19.7	1.1	0.6	2.0
3000.00	-1.6	-2.0	-13.8	-20.8	1.1	0.6	1.9
3100.00	-1.6	-2.0	-13.9	-22.4	1.1	0.6	1.7
3200.00	-1.6	-2.0	-14.0	-24.2	1.1	0.6	1.8
3300.00	-1.6	-2.0	-14.0	-25.9	1.1	0.6	1.9
3400.00	-1.7	-2.0	-14.1	-27.7	1.1	0.6	2.1
3500.00	-1.7	-2.0	-14.0	-28.6	1.1	0.6	2.1
3600.00	-1.7	-2.0	-14.0	-26.8	1.1	0.6	1.9
3700.00	-1.7	-2.0	-13.9	-24.3	1.1	0.6	2.1
3800.00	-1.7	-2.0	-13.7	-22.2	1.1	0.6	2.0
3900.00	-1.7	-2.0	-13.5	-20.6	1.1	0.6	1.9
4000.00	-1.8	-2.0	-13.3	-19.1	1.1	0.6	2.1
4100.00	-1.8	-2.1	-13.0	-17.6	1.1	0.6	1.6
4200.00	-1.8	-2.1	-12.7	-16.5	1.1	0.6	2.1
4300.00	-1.8	-2.1	-12.5	-15.7	1.1	0.6	2.1
4400.00	-1.8	-2.1	-12.2	-15.0	1.1	0.6	2.2
4500.00	-1.8	-2.2	-11.9	-14.2	1.1	0.6	1.8
4600.00	-1.9	-2.2	-11.7	-13.6	1.1	0.6	1.7
4700.00	-1.9	-2.2	-11.5	-13.1	1.1	0.6	2.2
4800.00	-1.9	-2.3	-11.3	-12.8	1.1	0.6	2.1
4900.00	-1.9	-2.3	-11.2	-12.5	1.1	0.6	2.4
5000.00	-1.9	-2.3	-11.1	-12.1	1.1	0.6	2.4
5100.00	-1.9	-2.4	-11.0	-11.9	1.1	0.6	1.9
5200.00	-1.9	-2.4	-10.9	-11.7	1.1	0.6	3.0
5300.00	-1.9	-2.4	-10.9	-11.6	1.1	0.6	2.3
5400.00	-1.9	-2.4	-10.9	-11.5	1.1	0.6	2.2
5500.00	-1.9	-2.4	-10.9	-11.3	1.1	0.6	2.2
5600.00	-1.9	-2.4	-11.1	-11.4	1.1	0.6	2.6
5700.00	-1.9	-2.4	-11.1	-11.4	1.1	0.6	1.8
5800.00	-1.8	-2.4	-11.2	-11.3	1.1	0.6	2.1
5900.00	-1.8	-2.4	-11.6	-11.5	1.1	0.6	2.5
6000.00	-1.8	-2.4	-11.7	-11.5	1.1	0.6	2.8
6100.00	-1.7	-2.3	-12.0	-11.6	1.1	0.6	2.0
6200.00	-1.7	-2.3	-12.4	-11.9	1.1	0.6	1.9
6300.00	-1.7	-2.3	-12.6	-12.0	1.1	0.6	2.0
6400.00	-1.7	-2.3	-13.0	-12.3	1.1	0.6	2.3
6500.00	-1.7	-2.3	-13.2	-12.3	1.1	0.6	1.6
6600.00	-1.7	-2.3	-13.4	-12.4	1.1	0.6	2.0
6700.00	-1.6	-2.3	-13.9	-12.7	1.1	0.6	2.3
6800.00	-1.7	-2.3	-14.0	-12.8	1.1	0.6	2.1
6900.00	-1.6	-2.3	-14.0	-12.7	1.1	0.6	1.9
7000.00	-1.7	-2.3	-14.2	-12.8	1.1	0.6	2.2
7100.00	-1.7	-2.4	-14.1	-12.8	1.1	0.6	1.8
7200.00	-1.7	-2.4	-13.9	-12.7	1.1	0.6	1.9
7300.00	-1.8	-2.4	-13.8	-12.6	1.1	0.6	2.2
7400.00	-1.9	-2.5	-13.2	-12.1	1.1	0.6	2.7
7500.00	-1.9	-2.5	-12.8	-12.0	1.1	0.6	2.3
7600.00	-2.0	-2.7	-12.4	-11.7	1.1	0.6	2.4
7700.00	-2.1	-2.7	-11.7	-11.1	1.1	0.6	2.4
7800.00	-2.2	-2.8	-11.2	-10.7	1.1	0.6	2.6
7900.00	-2.4	-3.0	-10.7	-10.1	1.2	0.6	2.5
8000.00	-2.4	-3.0	-9.8	-9.5	1.1	0.6	2.2

TEST CONDITIONS: $V_{DD} = +6.25$ V, $V_{EN} = 0$ V, $I_{DD} = 4$ mA, $I_{EN} = 0$ mA @ Temperature = $+25^\circ\text{C}$

FREQ (MHz)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
400.0	36.3	35.2	32.7	29.1	24.3	18.0	16.3
1000.0	40.0	38.3	35.4	30.9	24.7	16.5	15.4
2000.0	41.0	40.7	39.0	35.9	31.3	24.1	17.6
4000.0	40.8	41.5	41.4	40.1	37.5	32.9	26.5
6000.0	40.4	41.2	41.3	39.8	36.3	30.6	21.1
8000.0	39.8	40.8	41.5	40.3	36.9	31.3	21.2

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	70.8	70.5	70.0	68.9	65.5	55.1	46.2
1000.0	70.8	71.0	71.1	70.9	67.3	52.8	61.2
2000.0	70.3	70.2	70.2	70.1	69.4	65.0	54.4
4000.0	74.3	74.3	74.3	74.4	74.6	75.1	74.3
6000.0	74.3	74.1	73.8	73.5	73.1	71.9	64.3
8000.0	84.3	84.1	84.2	84.1	83.8	83.0	78.1

FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
400.0	13.7	10.8
1000.0	12.9	10.3
2000.0	14.7	12.0
4000.0	17.1	13.3
6000.0	17.6	14.0
8000.0	17.6	13.0



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IF/RF MICROWAVE COMPONENTS

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +6.25 V, V_{EN} = 0 V, I_{DD} = 4 mA, I_{EN} = 0 mA @ Temperature = +25°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)	FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
					K	Measure				
5500.00	-1.7	-2.3	-20.0	-17.8	1.1	0.7	2.2	5500.0	16.5	13.4
5600.00	-1.7	-2.3	-20.5	-17.7	1.1	0.7	2.4	6000.0	18.4	14.3
5700.00	-1.7	-2.3	-20.4	-17.4	1.1	0.7	2.3	7000.0	19.8	15.2
5800.00	-1.6	-2.3	-19.9	-16.8	1.1	0.7	2.2	8000.0	19.5	13.5
5900.00	-1.6	-2.3	-19.0	-16.2	1.1	0.7	2.1	8500.0	18.8	12.3
6000.00	-1.6	-2.3	-18.2	-15.5	1.1	0.7	2.3			
6100.00	-1.6	-2.4	-17.1	-14.7	1.1	0.6	2.5			
6200.00	-1.7	-2.4	-16.2	-14.1	1.1	0.6	2.4			
6300.00	-1.7	-2.4	-15.2	-13.4	1.1	0.6	2.5			
6400.00	-1.7	-2.5	-14.5	-12.8	1.1	0.6	2.2			
6500.00	-1.8	-2.5	-13.6	-12.2	1.1	0.6	2.2			
6600.00	-1.8	-2.6	-12.9	-11.7	1.1	0.6	2.4			
6700.00	-1.9	-2.7	-12.1	-11.1	1.1	0.6	2.4			
6800.00	-1.9	-2.7	-11.5	-10.6	1.1	0.6	2.5			
6900.00	-2.0	-2.8	-10.8	-10.0	1.1	0.6	2.4			
7000.00	-2.1	-2.9	-10.2	-9.6	1.1	0.6	2.6			
7100.00	-2.2	-3.0	-9.6	-9.1	1.1	0.6	2.3			
7200.00	-2.3	-3.1	-9.1	-8.6	1.1	0.6	2.5			
7300.00	-2.5	-3.2	-8.5	-8.1	1.1	0.6	2.3			
7400.00	-2.6	-3.4	-8.0	-7.8	1.1	0.6	2.5			
7500.00	-2.7	-3.5	-7.5	-7.3	1.1	0.6	2.8			
7600.00	-2.9	-3.7	-7.1	-6.9	1.1	0.6	2.7			
7700.00	-3.1	-3.8	-6.6	-6.5	1.1	0.6	2.7			
7800.00	-3.3	-4.0	-6.2	-6.2	1.1	0.6	2.6			
7900.00	-3.5	-4.2	-5.8	-5.8	1.2	0.6	2.9			
8000.00	-3.6	-4.4	-5.5	-5.6	1.2	0.6	3.2			
8100.00	-3.9	-4.6	-5.1	-5.2	1.2	0.6	3.1			
8200.00	-4.1	-4.8	-4.9	-5.0	1.2	0.6	3.0			
8300.00	-4.3	-5.0	-4.5	-4.7	1.2	0.6	3.0			
8400.00	-4.5	-5.2	-4.3	-4.6	1.2	0.6	2.9			
8500.00	-4.6	-5.3	-4.0	-4.2	1.2	0.6	3.1			

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
5500.0	70.6	70.5	70.3	70.1	69.8	68.6	64.1	41.1	41.2	41.0	40.1	39.0	35.4	29.3
6000.0	77.2	77.1	76.9	76.7	76.3	75.9	73.9	39.3	39.7	40.3	40.5	38.4	33.8	25.2
7000.0	88.7	88.6	88.4	88.2	87.9	87.2	85.2	38.7	39.2	40.0	40.0	37.6	33.3	27.1
8000.0	84.2	84.2	84.2	84.1	84.0	83.5	81.4	40.4	40.7	41.0	40.0	39.2	36.7	31.2
8500.0	91.5	91.4	91.3	91.2	91.2	92.3	97.6	40.5	41.4	41.0	38.9	34.1	26.2	17.2

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +4.75 V, V_{EN} = +4.75 V, I_{DD} = 74 mA, I_{EN} = 2.11 mA @ Temperature = - 45°C

FREQ (GHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure										
200.00	15.4	-33.2	-1.8	-4.1	1.3	0.9	18.7	20.7	3.7	28.7	31.4	31.3	31.0	30.7	30.2	29.8
300.00	20.2	-28.3	-5.7	-8.3	1.2	0.8	19.0	20.7	1.7	29.8	31.4	31.0	31.1	30.7	30.2	29.7
400.00	21.7	-26.9	-11.9	-14.1	1.1	0.7	19.6	21.2	1.3	29.7	31.2	31.7	31.6	31.7	31.4	31.0
500.00	22.0	-26.6	-18.0	-16.4	1.1	0.6	20.0	21.4	1.2	33.4	32.9	33.1	32.6	32.3	32.1	31.5
600.00	22.1	-26.5	-18.4	-15.3	1.1	0.6	20.4	21.6	1.0	31.6	33.4	32.7	33.3	33.2	32.7	32.3
700.00	22.1	-26.5	-16.6	-14.4	1.1	0.6	20.5	21.9	1.0	30.6	32.5	33.0	32.1	31.9	31.6	31.1
800.00	22.1	-26.6	-15.6	-14.0	1.1	0.6	20.7	22.0	1.0	33.0	33.0	33.1	33.0	32.6	32.4	32.0
900.00	22.1	-26.5	-15.1	-13.9	1.1	0.6	20.8	22.1	1.0	31.5	33.5	32.6	32.6	32.4	32.2	31.8
1000.00	22.1	-26.6	-14.8	-14.0	1.1	0.6	20.8	22.2	1.1	31.7	32.1	32.4	32.7	32.3	32.2	31.8
1100.00	22.1	-26.6	-14.8	-14.3	1.1	0.6	20.7	22.1	1.0	33.9	33.5	32.1	32.4	32.4	32.0	31.7
1200.00	22.1	-26.7	-14.9	-14.9	1.1	0.6	20.9	22.3	1.1	32.4	33.3	32.6	32.2	31.8	31.6	31.2
1300.00	22.1	-26.7	-15.0	-15.5	1.1	0.6	20.9	22.3	1.0	32.4	31.6	31.8	31.6	31.5	31.3	31.0
1400.00	22.1	-26.7	-15.4	-16.3	1.1	0.6	20.8	22.2	1.0	31.8	32.9	31.9	31.5	31.6	31.3	31.0
1500.00	22.1	-26.7	-15.7	-17.5	1.1	0.7	20.8	22.3	1.0	31.9	31.1	30.9	30.6	30.4	30.1	30.1
1600.00	22.1	-26.8	-15.8	-18.8	1.1	0.7	20.8	22.3	1.0	32.2	31.1	30.7	30.8	30.7	30.4	30.2
1700.00	22.1	-26.9	-15.8	-20.0	1.1	0.7	20.9	22.4	1.1	30.4	30.2	31.0	31.1	30.8	30.6	30.3
1800.00	22.2	-26.9	-16.0	-22.1	1.1	0.7	20.7	22.3	1.1	31.6	30.1	30.9	30.7	30.5	30.3	30.0
1900.00	22.2	-26.9	-16.1	-25.1	1.1	0.7	20.6	22.3	1.1	30.2	29.6	30.1	30.1	30.0	29.7	29.5
2000.00	22.2	-26.9	-15.9	-28.9	1.1	0.7	20.4	22.2	1.1	29.4	31.5	30.3	30.5	30.2	30.0	29.7
2100.00	22.2	-27.0	-15.5	-32.9	1.1	0.7	20.6	22.3	1.1	31.0	30.4	30.6	30.7	30.2	29.9	29.7
2200.00	22.2	-27.1	-15.2	-32.5	1.1	0.7	20.5	22.3	1.1	32.9	30.3	30.2	30.5	30.2	29.9	29.7
2300.00	22.2	-27.1	-14.7	-28.2	1.2	0.7	20.5	22.5	1.1	30.6	30.8	30.9	30.2	30.1	29.9	29.6
2400.00	22.2	-27.3	-14.2	-25.2	1.2	0.7	20.5	22.7	1.2	29.8	29.2	28.4	28.3	28.2	27.9	27.6
2500.00	22.2	-27.3	-14.0	-23.3	1.2	0.7	20.4	22.7	1.2	28.4	28.1	28.4	28.3	28.1	27.8	27.5
2600.00	22.2	-27.4	-13.6	-21.5	1.2	0.7	20.2	22.8	1.2	29.4	28.8	28.6	28.6	28.2	27.9	27.5
2700.00	22.1	-27.5	-13.3	-20.2	1.2	0.7	19.8	22.4	1.3	28.6	28.8	28.7	28.4	28.3	28.0	27.7
2800.00	22.1	-27.6	-12.9	-19.2	1.2	0.8	19.6	22.1	1.2	28.4	27.9	27.9	27.7	27.4	27.0	27.0
2900.00	22.1	-27.7	-12.4	-18.0	1.2	0.8	19.3	21.9	1.3	29.2	28.4	28.2	27.9	27.7	27.2	27.2
3000.00	22.0	-27.8	-12.0	-17.1	1.2	0.8	19.6	22.1	1.3	26.6	27.3	27.0	26.9	26.6	26.2	25.8
3100.00	22.0	-27.8	-11.6	-16.3	1.2	0.8	19.5	22.5	1.3	27.1	26.6	26.9	26.7	26.4	26.1	25.8
3200.00	22.0	-27.8	-11.3	-15.9	1.2	0.8	19.4	22.5	1.2	27.9	27.6	27.6	27.3	27.1	26.9	26.5
3300.00	22.0	-27.8	-11.1	-15.6	1.2	0.8	19.5	22.3	1.2	27.4	26.8	26.8	27.0	26.7	26.4	26.0
3400.00	22.0	-27.8	-11.0	-15.3	1.2	0.8	19.2	22.1	1.3	27.9	27.4	27.5	27.3	27.1	26.9	26.6
3500.00	22.0	-27.9	-10.9	-15.2	1.2	0.8	19.3	22.2	1.3	27.7	27.3	27.0	27.0	26.6	26.4	26.1
3600.00	22.1	-27.9	-11.0	-15.3	1.2	0.8	19.3	22.3	1.2	26.5	27.3	27.0	27.0	26.8	26.6	26.3
3700.00	22.1	-27.9	-11.0	-15.5	1.2	0.8	19.2	22.4	1.2	27.8	27.8	28.1	28.1	28.0	27.7	27.5
3800.00	22.1	-27.9	-11.1	-15.7	1.2	0.8	19.4	22.5	1.2	27.3	27.9	27.7	27.6	27.2	27.0	27.0
3900.00	22.1	-28.0	-11.2	-15.8	1.2	0.8	19.8	22.5	1.2	28.0	27.8	27.5	27.4	27.2	27.0	26.6
4000.00	22.2	-28.0	-11.3	-16.2	1.2	0.8	19.9	22.7	1.2	27.9	27.5	27.7	27.7	27.4	27.2	26.9
4100.00	22.2	-28.0	-11.6	-16.6	1.2	0.8	20.3	22.8	1.2	27.2	27.2	27.3	27.1	26.9	26.7	26.2
4200.00	22.3	-28.0	-11.8	-17.2	1.2	0.8	20.3	22.7	1.1	27.4	27.2	27.4	27.3	27.1	26.9	26.5
4300.00	22.3	-28.0	-12.1	-17.6	1.2	0.8	20.3	22.9	1.2	27.9	27.2	27.4	27.5	27.2	27.0	26.5
4400.00	22.3	-28.1	-12.6	-18.4	1.2	0.8	20.2	23.0	1.2	28.1	27.5	27.2	27.5	27.2	26.9	26.4
4500.00	22.4	-28.1	-12.8	-19.1	1.2	0.8	20.0	23.4	1.2	27.6	27.3	27.2	27.1	26.9	26.6	26.1
4600.00	22.4	-28.2	-13.4	-19.6	1.2	0.8	19.7	23.6	1.1	26.9	26.9	26.8	26.8	26.6	26.2	25.7
4700.00	22.4	-28.2	-14.0	-21.0	1.2	0.8	19.8	23.3	1.1	27.6	27.1	27.0	26.9	26.7	26.4	26.0
4800.00	22.5	-28.2	-14.4	-21.6	1.2	0.8	19.9	23.0	1.1	27.5	27.6	27.4	27.2	27.1	26.9	26.6
4900.00	22.5	-28.3	-15.4	-21.9	1.2	0.8	19.7	22.9	1.2	26.2	26.1	26.1	26.2	25.9	25.6	25.2
5000.00	22.6	-28.3	-15.8	-23.1	1.2	0.8	19.8	22.8	1.3	26.0	25.7	25.7	25.7	25.5	25.2	24.9
5100.00	22.7	-28.5	-16.7	-23.6	1.3	0.8	20.1	22.5	1.1	25.6	25.7	25.8	25.8	25.7	25.6	25.4
5200.00	22.6	-28.5	-17.9	-23.9	1.3	0.8	20.2	22.4	1.1	26.0	26.5	26.5	26.4	26.3	26.3	26.3
5300.00	22.8	-28.5	-18.1	-24.5	1.3	0.8	20.2	22.9	1.2	26.6	26.8	26.9	26.8	26.7	26.6	26.6
5400.00	22.7	-28.7	-19.7	-23.8	1.3	0.8	20.0	23.2	1.2	26.1	25.9	25.9	26.1	26.0	25.8	25.6
5500.00	22.8	-28.5	-20.5	-24.8	1.3	0.8	19.4	23.2	1.2	25.8	25.7	25.7	25.8	25.6	25.4	25.1
5600.00	22.9	-28.7	-20.0	-25.3	1.3	0.8	18.6	23.0	1.2	25.6	25.7	25.7	25.5	25.3	25.0	24.7
5700.00	22.8	-28.8	-21.7	-23.6	1.3	0.8	18.2	22.9	1.2	25.8	25.5	25.4	25.5	25.3	24.9	24.5
5800.00	22.9	-28.7	-20.6	-25.2	1.3	0.8	18.3	22.7	1.2	25.0	25.2	24.9	24.9	24.7	24.3	23.9
5900.00	22.9	-29.0	-18.9	-23.4	1.3	0.8	18.4	22.7	1.2	24.8	24.8	24.7	24.7	24.5	24.2	24.0
6000.00	22.8	-28.9	-19.6	-22.9	1.3	0.8	17.6	22.7	1.3	23.5	23.7	23.7	23.6	23.4	23.0	23.6
6100.00	23.0	-28.9	-17.0	-23.1	1.3	0.8	17.8	22.3	1.2	23.4	23.8	23.7	23.7	23.6	23.5	24.2
6200.00	22.9	-29.3	-15.5	-20.3	1.3	0.8	17.7	21.9	1.3	23.2	23.3	23.4	23.4	23.3	24.1	24.1
6300.00	22.9	-29.1	-15.2	-20.5	1.3	0.8	17.6	21.1	1.3	23.3	23.7	23.6	23.7	23.8	24.0	24.5
6400.00	23.0	-29.3	-13.1	-18.5												



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IF/RF MICROWAVE COMPONENTS



TEST CONDITIONS: $V_{DD} = +4.75$ V, $V_{EN} = +4.75$ V, $I_{DD} = 74$ mA, $I_{EN} = 2.11$ mA @ Temperature = -45°C

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	38.9	38.8	38.7	38.6	38.4	38.0	37.6
1000.0	37.1	37.0	37.0	36.9	36.8	36.6	36.2
2000.0	35.6	35.2	35.2	35.1	35.1	35.0	34.8
4000.0	37.4	37.5	37.6	37.8	38.0	38.3	38.9
6000.0	27.5	27.5	27.4	27.4	27.3	27.3	27.6
8000.0	33.4	33.4	33.6	34.0	34.7	36.2	38.7

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +4.75 V, V_{EN} = +4.75 V, I_{DD} = 80 mA, I_{EN} = 2.1 mA @ Temperature = -45°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure (dBm)										
5500.00	22.3	-29.5	-11.0	-9.9	1.3	0.7	18.8	23.0	1.1	26.2	26.7	26.6	26.6	26.4	26.0	
5600.00	22.4	-29.6	-10.8	-10.2	1.3	0.7	18.4	23.0	1.1	25.2	25.8	25.3	25.4	25.2	24.9	24.4
5700.00	22.4	-29.5	-11.3	-10.4	1.3	0.7	18.1	22.9	1.1	25.7	25.9	25.5	25.6	25.5	25.2	24.7
5800.00	22.5	-29.6	-11.0	-10.6	1.3	0.7	17.8	22.9	1.1	25.7	25.5	25.4	25.4	25.4	25.1	24.5
5900.00	22.5	-29.5	-11.5	-10.9	1.3	0.7	17.2	22.9	1.1	24.5	24.9	24.8	24.8	24.7	24.3	23.6
6000.00	22.7	-29.6	-11.1	-11.0	1.3	0.7	16.4	22.6	1.1	23.0	23.0	23.0	23.0	22.8	22.2	22.5
6100.00	22.7	-29.4	-11.6	-11.4	1.3	0.7	17.6	22.5	1.1	23.9	24.1	23.7	23.8	23.5	23.7	
6200.00	22.8	-29.6	-11.3	-11.5	1.3	0.8	17.9	22.3	1.1	23.2	23.7	23.2	23.2	23.2	24.1	
6300.00	22.8	-29.6	-11.7	-11.9	1.3	0.8	18.6	22.3	1.1	24.2	24.6	24.2	24.3	24.5	24.7	25.4
6400.00	23.0	-29.7	-11.4	-11.8	1.3	0.8	18.7	22.1	1.1	24.2	24.4	24.2	24.3	24.6	24.8	25.6
6500.00	23.0	-29.6	-11.9	-12.4	1.3	0.8	18.6	21.8	1.1	24.7	24.5	24.6	24.7	24.9	25.1	25.7
6600.00	23.1	-29.9	-11.7	-12.5	1.3	0.8	19.0	21.8	1.1	24.4	25.2	24.7	24.9	25.0	25.4	25.7
6700.00	23.1	-29.7	-12.3	-13.1	1.3	0.8	18.9	21.4	1.1	24.3	24.8	24.6	24.9	25.1	25.4	25.8
6800.00	23.2	-30.1	-12.2	-13.1	1.3	0.8	19.0	21.2	1.2	24.9	25.0	25.1	25.3	25.6	25.9	26.3
6900.00	23.2	-30.0	-12.9	-13.9	1.3	0.8	19.2	21.2	1.1	25.5	25.5	25.4	25.7	26.0	26.4	26.9
7000.00	23.3	-30.3	-12.8	-14.0	1.3	0.8	19.4	21.2	1.2	24.6	25.2	25.1	25.2	25.6	26.0	26.4
7100.00	23.3	-30.2	-13.7	-15.0	1.3	0.8	19.4	21.2	1.2	25.0	25.3	25.3	25.7	25.9	26.3	26.7
7200.00	23.4	-30.5	-13.9	-15.1	1.4	0.8	19.6	21.3	1.3	25.3	25.6	25.4	25.7	26.0	26.4	27.0
7300.00	23.4	-30.5	-15.2	-16.4	1.4	0.8	19.6	21.3	1.3	24.8	25.2	25.0	25.3	25.7	26.1	26.8
7400.00	23.5	-30.9	-15.4	-16.6	1.4	0.8	19.9	21.4	1.3	24.6	25.1	25.1	25.4	25.7	26.3	27.0
7500.00	23.5	-31.0	-17.2	-18.5	1.4	0.8	19.3	21.0	1.4	25.0	25.0	25.1	25.4	25.9	26.5	27.3
7600.00	23.6	-31.4	-17.3	-18.5	1.5	0.9	19.4	21.0	1.4	25.0	24.7	25.0	25.2	25.6	26.1	26.8
7700.00	23.5	-31.6	-19.8	-21.2	1.5	0.9	19.6	21.1	1.5	23.7	23.6	23.9	24.2	24.6	25.2	26.0
7800.00	23.5	-32.1	-18.5	-21.2	1.6	0.9	19.2	20.6	1.6	24.2	24.6	24.7	25.1	25.5	26.2	27.1
7900.00	23.3	-32.3	-20.7	-26.5	1.7	0.9	18.9	20.3	1.7	24.3	24.3	24.6	25.1	25.6	26.2	27.2
8000.00	23.3	-33.3	-16.9	-24.9	1.8	0.9	18.4	19.8	1.8	23.6	24.1	24.0	24.5	25.1	26.0	27.1
8100.00	23.0	-33.3	-17.3	-29.9	1.8	0.9	18.4	19.7	1.9	23.3	23.9	23.9	24.2	24.8	25.7	26.7
8200.00	22.7	-35.1	-12.9	-20.6	2.2	1.0	18.0	19.3	2.0	22.6	22.6	22.9	23.4	24.1	25.0	25.6
8300.00	22.4	-34.7	-12.9	-19.6	2.2	1.0	18.0	19.2	2.1	22.8	23.2	23.3	23.7	24.4	25.2	26.0
8400.00	21.6	-37.4	-9.4	-13.9	2.8	1.1	17.7	18.9	2.3	22.8	23.0	23.3	23.7	24.4	25.2	26.0
8500.00	21.4	-36.9	-9.0	-13.1	2.7	1.1	17.3	18.4	2.4	21.4	21.8	22.3	23.1	24.3	23.7	

FREQ (MHz)	IP-2 Output Pout = -2	IP-2 Output Pout = +0	IP-2 Output Pout = +2	IP-2 Output Pout = +4	IP-2 Output Pout = +6	IP-2 Output Pout = +8
	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)
5500.0	34.5	34.5	34.4	34.3	34.4	34.5
6000.0	29.1	29.1	28.9	28.8	28.6	28.6
7000.0	39.6	39.5	39.4	39.3	39.5	39.9
8000.0	48.5	48.4	48.3	48.2	48.1	48.8
8500.0	57.6	57.5	57.4	57.3	57.4	59.3



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +4.75$ V, $V_{EN} = 0$ V, $I_{DD} = 3$ mA, $I_{EN} = 0$ mA @ Temperature = -45°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	K	Stability Measure	Noise Figure (dB)
200.00	3.5	-3.6	-4.0	-8.2	1.0	0.8	2.5
300.00	2.2	-2.2	-6.6	-11.0	1.0	0.6	1.3
400.00	1.6	-1.7	-9.2	-13.3	1.0	0.5	1.0
500.00	1.3	-1.3	-11.9	-15.2	1.0	0.4	0.9
600.00	1.1	-1.2	-14.9	-17.0	1.0	0.4	0.8
700.00	1.1	-1.1	-18.2	-18.5	1.0	0.4	0.8
800.00	1.1	-1.1	-22.3	-19.0	1.0	0.4	0.9
900.00	1.0	-1.1	-28.3	-18.7	1.0	0.4	0.9
1000.00	1.0	-1.1	-37.5	-18.4	1.0	0.4	1.0
1100.00	1.0	-1.1	-29.0	-17.9	1.0	0.4	0.7
1200.00	1.0	-1.1	-24.1	-17.4	1.0	0.4	1.1
1300.00	1.0	-1.1	-21.2	-16.9	1.0	0.4	0.5
1400.00	1.1	-1.1	-19.1	-16.3	1.0	0.4	0.9
1500.00	1.1	-1.2	-17.7	-15.8	1.0	0.4	0.8
1600.00	1.1	-1.2	-16.5	-15.6	1.0	0.4	0.7
1700.00	1.2	-1.2	-15.7	-15.6	1.0	0.4	0.9
1800.00	1.2	-1.3	-15.0	-15.6	1.0	0.4	1.0
1900.00	1.2	-1.4	-14.5	-15.4	1.0	0.4	0.9
2000.00	1.2	-1.4	-14.2	-15.3	1.0	0.4	0.7
2100.00	1.3	-1.4	-14.0	-15.5	1.0	0.5	1.1
2200.00	1.3	-1.4	-13.8	-15.7	1.0	0.5	0.9
2300.00	1.3	-1.5	-13.7	-16.0	1.0	0.5	1.0
2400.00	1.3	-1.5	-13.7	-16.4	1.0	0.5	1.1
2500.00	1.3	-1.5	-13.6	-16.9	1.0	0.5	1.1
2600.00	1.4	-1.6	-13.8	-17.6	1.0	0.5	1.2
2700.00	1.4	-1.7	-14.0	-18.5	1.0	0.5	1.2
2800.00	1.4	-1.7	-14.2	-19.7	1.1	0.6	1.2
2900.00	1.4	-1.8	-14.5	-20.7	1.1	0.6	1.4
3000.00	1.4	-1.8	-14.6	-22.0	1.1	0.6	1.5
3100.00	1.4	-1.8	-14.7	-23.9	1.1	0.6	1.3
3200.00	1.4	-1.8	-14.7	-26.5	1.1	0.6	1.0
3300.00	1.4	-1.7	-14.7	-29.4	1.1	0.6	1.5
3400.00	1.4	-1.7	-14.8	-33.2	1.1	0.6	1.1
3500.00	1.5	-1.7	-14.8	-34.6	1.1	0.6	1.4
3600.00	1.5	-1.7	-14.7	-29.0	1.1	0.6	0.9
3700.00	1.5	-1.7	-14.6	-25.7	1.1	0.6	1.2
3800.00	1.5	-1.7	-14.4	-23.3	1.1	0.6	1.1
3900.00	1.5	-1.7	-14.2	-21.3	1.1	0.6	1.2
4000.00	1.5	-1.8	-13.9	-19.5	1.1	0.6	1.2
4100.00	1.5	-1.8	-13.5	-18.1	1.1	0.6	1.5
4200.00	1.6	-1.8	-13.2	-17.0	1.1	0.6	1.3
4300.00	1.6	-1.8	-12.9	-16.0	1.1	0.6	1.3
4400.00	1.6	-1.8	-12.5	-15.1	1.1	0.6	1.4
4500.00	1.6	-1.9	-12.3	-14.5	1.1	0.6	1.1
4600.00	1.7	-1.9	-12.0	-13.9	1.1	0.6	0.9
4700.00	1.7	-1.9	-11.8	-13.3	1.1	0.6	1.7
4800.00	1.7	-2.0	-11.6	-13.0	1.1	0.6	1.2
4900.00	1.7	-2.0	-11.4	-12.7	1.1	0.6	1.1
5000.00	1.7	-2.1	-11.3	-12.3	1.1	0.6	1.3
5100.00	1.7	-2.1	-11.2	-12.1	1.1	0.6	1.3
5200.00	1.7	-2.1	-11.0	-11.9	1.1	0.6	0.5
5300.00	1.7	-2.1	-11.0	-11.8	1.1	0.6	0.9
5400.00	1.7	-2.2	-11.0	-11.7	1.1	0.6	1.4
5500.00	1.7	-2.2	-10.9	-11.4	1.1	0.5	1.4
5600.00	1.7	-2.2	-11.0	-11.4	1.1	0.5	1.4
5700.00	1.7	-2.2	-11.0	-11.4	1.1	0.5	1.5
5800.00	1.7	-2.1	-11.1	-11.3	1.1	0.5	1.6
5900.00	1.7	-2.1	-11.4	-11.5	1.1	0.5	1.8
6000.00	1.6	-2.1	-11.4	-11.3	1.1	0.5	1.5
6100.00	1.6	-2.1	-11.7	-11.5	1.1	0.5	1.1
6200.00	1.6	-2.1	-11.9	-11.7	1.1	0.5	1.5
6300.00	1.6	-2.1	-12.0	-11.6	1.1	0.5	1.2
6400.00	1.6	-2.0	-12.4	-11.9	1.1	0.5	1.3
6500.00	1.6	-2.1	-12.5	-11.9	1.1	0.5	1.2
6600.00	1.5	-2.0	-12.6	-11.8	1.1	0.5	1.7
6700.00	1.5	-2.0	-12.9	-12.1	1.1	0.5	1.3
6800.00	1.6	-2.1	-13.0	-12.1	1.1	0.5	1.1
6900.00	1.5	-2.0	-13.1	-12.1	1.1	0.5	1.3
7000.00	1.6	-2.1	-13.2	-12.1	1.1	0.5	1.5
7100.00	1.6	-2.1	-13.0	-11.9	1.1	0.5	1.8
7200.00	1.6	-2.1	-12.9	-11.9	1.1	0.5	1.3
7300.00	1.7	-2.2	-12.8	-11.7	1.1	0.6	1.5
7400.00	1.7	-2.3	-12.4	-11.4	1.1	0.6	2.0
7500.00	1.8	-2.3	-12.1	-11.2	1.1	0.6	2.6
7600.00	1.9	-2.4	-11.8	-10.9	1.1	0.6	1.4
7700.00	2.0	-2.5	-11.1	-10.4	1.1	0.6	2.0
7800.00	2.1	-2.6	-10.8	-10.2	1.1	0.6	2.6
7900.00	2.3	-2.8	-10.3	-9.6	1.1	0.6	1.8
8000.00	2.3	-2.8	-9.6	-9.1	1.1	0.6	2.3

TEST CONDITIONS: $V_{DD} = +4.75$ V, $V_{EN} = 0$ V, $I_{DD} = 3$ mA, $I_{EN} = 0$ mA @ Temperature = -45°C

FREQ (MHz)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
400.0	43.0	44.2	44.3	44.1	41.7	33.0	24.0
1000.0	42.3	43.9	45.5	43.5	33.1	23.1	16.7
2000.0	42.6	44.6	46.1	46.6	41.8	31.5	20.5
4000.0	43.0	43.4	44.6	44.9	45.1	43.4	35.8
6000.0	41.7	43.3	44.2	45.7	46.3	44.2	33.7
8000.0	45.1	46.1	46.1	46.8	46.7	44.0	34.5

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	71.1	70.9	70.7	70.5	70.3	68.9	60.3
1000.0	71.2	71.3	71.5	71.9	72.2	65.0	52.0
2000.0	71.3	71.1	71.1	71.2	71.3	70.3	59.4
4000.0	72.0	72.0	72.0	71.9	72.0	72.0	71.7
6000.0	74.2	74.1	73.9	73.7	73.4	72.9	71.4
8000.0	84.8	84.8	84.8	84.8	84.7	84.5	83.6

FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
400.0	16.3	13.6
1000.0	13.9	11.8
2000.0	15.4	13.2
4000.0	18.2	15.7
6000.0	19.0	16.0
8000.0	18.9	15.3



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +4.75 V, V_{EN} = 0 V, I_{DD} = 3 mA, I_{EN} = 0 mA @ Temperature = -45°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)	FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
					K	Measure				
5500.00	-1.5	-2.0	-21.8	-18.9	1.1	0.6	1.2	5500.0	17.9	15.3
5600.00	-1.5	-2.0	-22.6	-19.2	1.1	0.6	1.3	6000.0	18.9	16.2
5700.00	-1.4	-2.0	-22.2	-19.1	1.1	0.6	1.2	7000.0	20.7	17.4
5800.00	-1.4	-2.0	-21.4	-18.5	1.1	0.6	1.3	8000.0	21.1	15.8
5900.00	-1.4	-2.0	-20.0	-17.7	1.1	0.6	1.5	8500.0	20.0	14.5
6000.00	-1.4	-2.0	-19.0	-16.9	1.1	0.6	1.2			
6100.00	-1.4	-2.0	-17.6	-15.8	1.1	0.6	0.9			
6200.00	-1.5	-2.1	-16.5	-15.0	1.1	0.6	1.4			
6300.00	-1.5	-2.1	-15.3	-14.0	1.1	0.6	1.6			
6400.00	-1.5	-2.1	-14.5	-13.3	1.1	0.6	1.3			
6500.00	-1.6	-2.2	-13.5	-12.5	1.1	0.6	1.6			
6600.00	-1.6	-2.2	-12.7	-11.9	1.1	0.6	1.0			
6700.00	-1.7	-2.3	-11.8	-11.1	1.1	0.6	1.4			
6800.00	-1.8	-2.4	-11.1	-10.6	1.1	0.6	1.8			
6900.00	-1.9	-2.5	-10.4	-9.9	1.1	0.6	1.4			
7000.00	-2.0	-2.6	-9.8	-9.4	1.1	0.6	1.9			
7100.00	-2.1	-2.7	-9.1	-8.8	1.1	0.6	1.6			
7200.00	-2.2	-2.8	-8.6	-8.3	1.1	0.6	1.1			
7300.00	-2.4	-3.0	-8.0	-7.8	1.1	0.6	1.3			
7400.00	-2.5	-3.1	-7.5	-7.4	1.1	0.6	1.5			
7500.00	-2.7	-3.3	-7.0	-6.9	1.1	0.6	1.8			
7600.00	-2.9	-3.4	-6.6	-6.5	1.1	0.6	1.7			
7700.00	-3.1	-3.6	-6.1	-6.1	1.1	0.6	1.3			
7800.00	-3.2	-3.8	-5.8	-5.9	1.1	0.6	1.5			
7900.00	-3.4	-4.0	-5.4	-5.5	1.1	0.5	2.4			
8000.00	-3.6	-4.2	-5.1	-5.3	1.1	0.5	2.1			
8100.00	-3.8	-4.3	-4.8	-4.9	1.1	0.5	2.2			
8200.00	-4.0	-4.5	-4.6	-4.8	1.1	0.5	1.8			
8300.00	-4.2	-4.7	-4.2	-4.4	1.1	0.5	1.9			
8400.00	-4.4	-4.9	-4.1	-4.3	1.1	0.5	1.7			
8500.00	-4.6	-5.1	-3.8	-4.0	1.1	0.5	1.7			

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-3 Output Pout = -2 (MHz)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
5500.0	70.5	70.3	70.3	70.0	69.8	69.0	66.8	40.7	42.0	42.6	42.2	42.5	42.5
6000.0	77.0	77.1	77.1	77.0	76.8	76.5	76.1	40.6	41.1	41.5	42.7	42.8	36.6
7000.0	90.4	90.4	90.2	90.1	89.9	89.7	89.0	40.0	39.6	41.1	43.3	43.4	37.5
8000.0	84.9	85.0	84.9	84.9	84.9	84.7	84.8	41.2	41.7	42.2	40.9	41.1	40.9
8500.0	91.4	91.4	91.2	91.1	90.9	92.5	93.0	41.7	43.1	44.5	46.4	48.7	39.2



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +5.0$ V, $V_{EN} = +5.0$ V, $I_{DD} = 80$ mA, $I_{EN} = 2.22$ mA @ Temperature = -45°C

FREQ (GHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure										
200.00	15.6	-33.4	-1.8	-1.8	1.4	0.9	19.4	21.3	3.6	32.9	33.2	31.4	32.4	31.9	31.6	31.1
300.00	20.4	-28.6	-5.8	-5.8	1.2	0.8	19.6	21.2	1.8	31.5	31.1	32.3	32.5	31.8	31.1	31.1
400.00	21.9	-27.0	-12.2	-12.2	1.1	0.7	20.1	21.7	1.3	34.6	31.5	33.3	33.6	33.4	33.1	32.4
500.00	22.2	-26.8	-17.9	-17.9	1.1	0.6	20.5	21.9	1.2	31.9	31.8	33.1	34.5	34.0	33.6	33.1
600.00	22.3	-26.8	-17.6	-17.6	1.1	0.6	20.9	22.1	1.1	36.5	34.8	35.4	35.0	34.6	34.3	33.8
700.00	22.3	-26.7	-15.8	-15.8	1.1	0.6	21.0	22.4	1.0	33.1	33.3	34.3	34.0	33.6	33.2	32.6
800.00	22.3	-26.8	-14.9	-14.9	1.1	0.6	21.1	22.5	1.0	33.2	33.4	34.6	34.7	34.2	33.9	33.5
900.00	22.2	-26.9	-14.4	-14.4	1.1	0.6	21.2	22.6	1.0	33.0	34.2	34.5	34.3	34.0	33.8	33.3
1000.00	22.3	-26.8	-14.2	-14.2	1.1	0.6	21.3	22.7	1.0	34.2	34.3	34.4	34.3	34.0	33.7	33.4
1100.00	22.3	-26.9	-14.2	-14.2	1.1	0.6	21.2	22.6	1.0	34.2	34.4	33.8	34.0	34.0	33.6	33.2
1200.00	22.3	-26.9	-14.3	-14.3	1.1	0.6	21.3	22.7	1.0	34.4	33.9	33.9	33.6	33.3	33.0	32.8
1300.00	22.3	-26.9	-14.5	-14.5	1.1	0.6	21.3	22.7	1.0	33.7	32.5	33.4	33.2	33.0	32.7	32.5
1400.00	22.3	-27.0	-14.9	-14.9	1.1	0.6	21.2	22.7	1.0	32.9	32.5	32.9	33.3	33.1	32.9	32.5
1500.00	22.3	-27.0	-15.3	-15.3	1.1	0.7	21.1	22.8	1.0	30.7	32.3	32.7	32.4	32.1	31.9	31.5
1600.00	22.3	-27.0	-15.6	-15.6	1.1	0.7	21.2	22.8	1.0	32.1	32.1	32.5	32.4	32.1	31.9	31.6
1700.00	22.3	-27.1	-15.7	-15.7	1.1	0.7	21.3	22.9	1.0	31.9	31.1	32.6	32.4	32.3	32.0	31.7
1800.00	22.4	-27.0	-16.1	-16.1	1.1	0.7	21.0	22.8	1.1	31.8	32.2	32.7	31.8	32.0	31.7	31.4
1900.00	22.4	-27.1	-16.3	-16.3	1.1	0.7	21.0	22.8	1.1	32.3	33.0	31.6	31.4	31.1	30.9	30.9
2000.00	22.4	-27.1	-16.3	-16.3	1.1	0.7	20.8	22.6	1.1	32.6	32.0	32.3	32.0	31.7	31.4	31.1
2100.00	22.4	-27.2	-16.0	-16.0	1.1	0.7	21.0	22.8	1.1	31.8	31.1	31.9	31.7	31.5	31.3	31.0
2200.00	22.4	-27.2	-15.8	-15.8	1.1	0.7	20.9	22.8	1.1	33.4	30.9	31.5	31.7	31.5	31.4	31.1
2300.00	22.4	-27.3	-15.4	-15.4	1.2	0.7	20.9	23.0	1.2	33.7	31.6	31.7	31.5	31.6	31.3	31.1
2400.00	22.4	-27.4	-14.9	-14.9	1.2	0.7	20.7	23.1	1.2	29.1	30.0	29.6	29.6	29.7	29.3	28.9
2500.00	22.4	-27.5	-14.7	-14.7	1.2	0.7	20.7	23.2	1.2	29.1	29.4	29.9	29.8	29.5	29.2	28.9
2600.00	22.4	-27.5	-14.3	-14.3	1.2	0.7	20.4	23.3	1.2	31.0	30.7	29.6	29.8	29.5	29.3	29.0
2700.00	22.4	-27.7	-13.9	-13.9	1.2	0.7	20.0	22.9	1.2	29.1	30.5	30.2	30.1	29.8	29.5	29.1
2800.00	22.4	-27.8	-13.6	-13.6	1.2	0.7	19.9	22.6	1.2	30.2	29.3	29.2	29.3	29.1	28.8	28.4
2900.00	22.3	-27.8	-13.1	-13.1	1.2	0.8	19.6	22.3	1.3	32.0	29.6	29.6	29.4	29.1	28.1	27.8
3000.00	22.3	-28.0	-12.6	-12.6	1.2	0.8	19.8	22.6	1.3	27.9	28.5	28.5	28.2	28.0	27.7	27.2
3100.00	22.3	-27.9	-12.1	-12.1	1.2	0.8	19.7	22.9	1.3	29.8	28.6	28.3	28.2	27.9	27.6	27.2
3200.00	22.3	-28.0	-11.8	-11.8	1.2	0.8	19.7	22.9	1.3	28.6	28.3	28.6	28.7	28.6	28.3	28.0
3300.00	22.3	-28.0	-11.6	-11.6	1.2	0.8	19.7	22.8	1.2	28.3	28.7	28.4	28.3	28.0	27.8	27.4
3400.00	22.3	-28.0	-11.4	-11.4	1.2	0.8	19.5	22.5	1.2	28.1	30.0	28.4	28.7	28.5	28.3	28.0
3500.00	22.3	-28.1	-11.4	-11.4	1.2	0.8	19.6	22.6	1.3	28.3	28.1	28.1	28.0	27.8	27.5	27.3
3600.00	22.3	-28.1	-11.4	-11.4	1.2	0.8	19.6	22.6	1.2	28.1	28.2	28.2	28.3	28.1	27.9	27.7
3700.00	22.3	-28.1	-11.4	-11.4	1.2	0.8	19.5	22.9	1.2	29.4	29.6	29.3	29.4	29.2	29.2	28.9
3800.00	22.3	-28.1	-11.5	-11.5	1.2	0.8	19.7	23.0	1.2	28.7	28.3	28.9	28.8	28.7	28.6	28.4
3900.00	22.4	-28.1	-11.6	-11.6	1.2	0.8	20.0	23.0	1.2	28.7	28.5	28.8	28.4	28.5	28.4	28.1
4000.00	22.4	-28.2	-11.7	-11.7	1.2	0.8	20.2	23.1	1.2	28.9	28.9	29.1	28.9	28.8	28.6	28.3
4100.00	22.4	-28.2	-12.0	-12.0	1.2	0.8	20.5	23.3	1.2	29.1	28.2	28.4	28.4	28.2	28.1	27.8
4200.00	22.5	-28.2	-12.1	-12.1	1.2	0.8	20.6	23.2	1.2	29.2	28.6	28.8	28.6	28.3	28.1	27.8
4300.00	22.5	-28.3	-12.5	-12.5	1.2	0.8	20.5	23.3	1.2	27.6	29.1	29.0	28.7	28.6	28.5	28.2
4400.00	22.5	-28.3	-13.0	-13.0	1.2	0.8	20.4	23.5	1.1	28.7	29.1	28.5	28.8	28.5	28.4	28.1
4500.00	22.6	-28.3	-13.3	-13.3	1.2	0.8	20.3	23.8	1.2	28.7	28.3	28.3	28.4	28.3	28.1	27.7
4600.00	22.6	-28.4	-13.9	-13.9	1.2	0.8	19.9	24.0	1.1	28.0	28.5	28.1	28.2	28.0	27.8	27.4
4700.00	22.7	-28.4	-14.4	-14.4	1.2	0.8	20.1	23.7	1.2	28.0	28.1	28.1	28.2	28.1	27.9	27.6
4800.00	22.7	-28.4	-14.8	-14.8	1.2	0.8	20.3	23.4	1.2	27.8	28.6	28.3	28.5	28.4	28.3	28.1
4900.00	22.7	-28.5	-15.8	-15.8	1.2	0.8	20.0	23.3	1.1	27.5	27.4	27.4	27.3	27.3	27.1	26.8
5000.00	22.8	-28.5	-16.2	-16.2	1.2	0.8	20.1	23.3	1.3	27.4	26.9	27.0	27.0	26.8	26.6	26.4
5100.00	22.9	-28.7	-17.2	-17.2	1.3	0.8	20.5	23.0	1.1	27.0	26.7	26.8	26.9	26.9	26.9	26.8
5200.00	22.8	-28.6	-18.5	-18.5	1.3	0.8	20.5	22.9	1.1	27.4	27.1	27.3	27.4	27.5	27.5	27.6
5300.00	23.0	-28.7	-18.8	-18.8	1.3	0.8	20.6	23.3	1.2	28.3	28.0	27.9	27.7	27.9	27.9	27.9
5400.00	22.9	-28.8	-20.6	-20.6	1.3	0.8	20.3	23.6	1.2	27.1	27.3	27.1	27.2	27.2	27.1	27.0
5500.00	23.0	-28.8	-21.5	-21.5	1.3	0.8	19.8	23.6	1.2	27.1	27.0	26.9	26.9	26.8	26.5	26.5
5600.00	23.1	-28.8	-21.0	-21.0	1.3	0.8	19.0	23.5	1.2	26.5	26.9	26.8	26.7	26.6	26.5	26.1
5700.00	23.0	-29.0	-23.2	-23.2	1.3	0.8	18.7	23.3	1.2	26.5	26.5	26.7	26.7	26.6	26.4	26.0
5800.00	23.1	-28.8	-22.0	-22.0	1.3	0.8	18.7	23.1	1.2	25.8	26.3	26.2	26.1	26.0	25.8	25.4
5900.00	23.1	-29.1	-20.0	-20.0	1.3	0.8	18.7	23.1	1.2	26.2	25.8	25.8	25.8	25.6	25.3	25.3
6000.00	23.0	-29.1	-20.9	-20.9	1.3	0.8	17.9	23.0	1.3	24.5	24.7	24.8	24.8	24.6	24.4	24.3
6100.00	23.2	-29.0	-17.9	-17.9	1.3	0.8	18.1	22.7	1.2	24.9	24.7	24.8	24.7	24.7	25.0	25.0
6200.00	23.1	-29.4	-16.2	-16.2	1.3	0.8	18.1	22.2	1.3	24.3	24.2	24.2	24.2	24.3	24.4	24.8
6300.00	23.1	-29.3	-15.9	-15.9	1.3	0.8	18.0	21.4	1.3	24.5	24.3	24.5	24.6	24.7	24.9	25.3
6400.00	23.2	-29.5	-13.7	-13.7												

TEST CONDITIONS: $V_{DD} = +5.0$ V, $V_{EN} = +5.0$ V, $I_{DD} = 80$ mA, $I_{EN} = 2.22$ mA @ Temperature = - 45°C

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	40.7	40.5	40.5	40.4	40.2	40.0	39.5
1000.0	38.7	38.6	38.6	38.5	38.4	38.2	
2000.0	36.7	36.6	36.5	36.5	36.5	36.3	
4000.0	38.1	38.1	38.2	38.3	38.5	38.8	39.3
6000.0	28.5	28.5	28.4	28.4	28.4	28.4	28.5
8000.0	34.3	34.3	34.4	34.6	35.3	36.5	38.8

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +5.0$ V, $V_{EN} = +5.0$ V, $I_{DD} = 88$ mA, $I_{EN} = 2.21$ mA @ Temperature = -45°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure (dBm)										
5500.00	22.4	-29.7	-11.3	-10.2	1.3	0.7	19.6	23.4	1.1	28.0	27.0	27.6	27.7	27.6	27.3	
5600.00	22.6	-29.7	-11.1	-10.4	1.3	0.7	19.2	23.4	1.1	26.1	26.4	26.4	26.4	26.2	25.7	
5700.00	22.5	-29.6	-11.6	-10.7	1.3	0.7	18.9	23.3	1.1	26.4	27.1	26.6	26.6	26.5	26.1	
5800.00	22.7	-29.7	-11.3	-10.8	1.3	0.7	18.8	23.3	1.1	26.3	26.5	26.5	26.5	26.4	26.0	
5900.00	22.7	-29.6	-11.8	-11.2	1.3	0.7	18.1	23.2	1.1	25.4	26.0	25.8	25.8	25.6	25.1	
6000.00	22.8	-29.7	-11.4	-11.3	1.3	0.7	17.2	22.8	1.1	23.9	24.2	24.1	24.1	24.0	23.6	
6100.00	22.8	-29.6	-11.9	-11.7	1.3	0.8	18.3	22.8	1.1	24.8	24.8	24.6	24.7	24.8	24.5	
6200.00	23.0	-29.7	-11.6	-11.7	1.3	0.8	18.5	22.6	1.1	24.1	24.3	24.0	24.1	24.1	24.5	
6300.00	23.0	-29.7	-12.0	-12.2	1.3	0.8	19.1	22.6	1.1	24.7	25.1	25.0	25.0	25.2	25.4	
6400.00	23.1	-30.0	-11.7	-12.1	1.3	0.8	19.2	22.4	1.1	24.8	25.0	24.8	25.1	25.3	25.6	
6500.00	23.1	-29.8	-12.2	-12.7	1.3	0.8	19.1	22.1	1.1	24.7	25.2	25.1	25.3	25.5	25.8	
6600.00	23.2	-30.1	-12.0	-12.6	1.3	0.8	19.5	22.1	1.1	25.1	25.1	25.3	25.5	25.7	26.1	
6700.00	23.2	-30.0	-12.7	-13.3	1.3	0.8	19.4	21.8	1.1	24.9	25.2	25.2	25.4	25.8	26.1	
6800.00	23.3	-30.2	-12.6	-13.3	1.3	0.8	19.5	21.7	1.2	25.5	25.8	25.7	25.9	26.2	26.6	
6900.00	23.3	-30.2	-13.2	-14.1	1.3	0.8	19.7	21.7	1.2	25.7	26.2	25.9	26.2	27.0	27.6	
7000.00	23.4	-30.5	-13.2	-14.1	1.3	0.8	19.8	21.7	1.2	25.4	25.9	25.6	25.8	26.2	27.2	
7100.00	23.4	-30.5	-14.2	-15.1	1.4	0.8	19.8	21.6	1.2	24.9	25.5	25.9	26.1	26.5	26.9	
7200.00	23.5	-30.8	-14.3	-15.1	1.4	0.8	20.0	21.8	1.3	25.7	25.7	25.8	26.1	26.5	27.0	
7300.00	23.5	-30.7	-15.7	-16.4	1.4	0.8	20.0	21.7	1.3	24.8	25.2	25.4	25.7	26.2	27.4	
7400.00	23.6	-31.1	-16.0	-16.6	1.4	0.8	20.3	21.9	1.3	25.2	25.4	25.4	25.7	26.2	26.8	
7500.00	23.6	-31.2	-17.9	-18.4	1.4	0.8	19.8	21.4	1.4	25.1	25.6	25.5	25.9	26.2	26.9	
7600.00	23.7	-31.7	-18.0	-18.3	1.5	0.9	19.8	21.4	1.5	24.9	25.3	25.3	25.7	26.1	27.4	
7700.00	23.5	-31.8	-20.8	-20.9	1.5	0.9	20.1	21.5	1.5	24.0	24.2	24.2	24.7	25.1	25.8	
7800.00	23.6	-32.5	-19.3	-21.0	1.6	0.9	19.6	21.1	1.6	24.6	24.7	25.1	25.4	26.0	26.6	
7900.00	23.4	-32.5	-21.5	-26.2	1.7	0.9	19.3	20.7	1.7	24.6	24.9	25.0	25.3	25.9	26.6	
8000.00	23.3	-33.5	-17.3	-25.1	1.8	0.9	18.8	20.3	1.8	23.7	24.1	24.3	24.8	25.4	26.3	
8100.00	23.1	-33.7	-17.5	-31.2	1.9	0.9	18.8	20.2	1.9	23.7	24.0	24.2	24.6	25.1	27.2	
8200.00	22.7	-35.3	-13.0	-21.0	2.2	1.0	18.5	19.8	2.0	22.5	23.2	23.8	24.4	25.5	26.5	
8300.00	22.5	-35.1	-13.0	-19.9	2.2	1.0	18.5	19.7	2.1	22.9	23.1	23.5	24.0	24.7	26.9	
8400.00	21.6	-37.7	-9.4	-14.1	2.9	1.1	18.2	19.3	2.3	22.9	22.7	23.5	23.9	24.5	25.6	
8500.00	21.5	-37.3	-9.1	-13.2	2.8	1.1	17.8	18.9	2.4	21.7	21.7	21.9	22.5	23.3	24.5	

FREQ (MHz)	IP-2 Output Pout = -2	IP-2 Output Pout = +0	IP-2 Output Pout = +2	IP-2 Output Pout = +4	IP-2 Output Pout = +6	IP-2 Output Pout = +8	IP-2 Output Pout = +10
	(dBm)						
5500.0	35.7	35.7	35.6	35.5	35.5	35.6	35.7
6000.0	30.4	30.3	30.2	30.1	30.0	29.9	29.9
7000.0	40.2	40.1	40.0	39.9	39.8	39.9	40.2
8000.0	49.0	48.9	48.8	48.7	48.6	48.7	49.2
8500.0	58.3	58.1	58.0	58.0	57.9	58.3	59.3



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +5.0$ V, $V_{EN} = 0$ V, $I_{DD} = 3$ mA, $I_{EN} = 0$ mA @ Temperature = -45°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	K	Stability Measure	Noise Figure (dB)
200.00	-3.6	-3.7	3.6	-8.3	1.1	0.8	2.5
300.00	-2.2	-2.3	-6.6	-11.1	1.0	0.6	1.3
400.00	-1.6	-1.7	-9.2	-13.3	1.0	0.5	1.0
500.00	-1.3	-1.4	-11.9	-15.2	1.0	0.4	0.9
600.00	-1.2	-1.2	-14.8	-17.0	1.0	0.4	1.0
700.00	-1.1	-1.1	-18.1	-18.4	1.0	0.4	0.8
800.00	-1.1	-1.1	-22.3	-18.8	1.0	0.4	0.8
900.00	-1.1	-1.1	-28.0	-18.6	1.0	0.4	0.7
1000.00	-1.0	-1.1	-36.1	-18.2	1.0	0.4	0.6
1100.00	-1.0	-1.1	-28.7	-17.8	1.0	0.4	0.7
1200.00	-1.0	-1.1	-24.0	-17.3	1.0	0.4	0.7
1300.00	-1.0	-1.1	-21.1	-16.8	1.0	0.4	0.8
1400.00	-1.1	-1.2	-19.1	-16.2	1.0	0.4	0.7
1500.00	-1.1	-1.2	-17.6	-15.7	1.0	0.4	0.7
1600.00	-1.2	-1.2	-16.5	-15.6	1.0	0.4	0.9
1700.00	-1.2	-1.3	-15.7	-15.6	1.0	0.4	0.7
1800.00	-1.2	-1.3	-15.0	-15.6	1.0	0.4	1.1
1900.00	-1.2	-1.4	-14.5	-15.3	1.0	0.4	0.8
2000.00	-1.3	-1.4	-14.1	-15.2	1.0	0.5	1.0
2100.00	-1.3	-1.4	-13.9	-15.5	1.0	0.5	1.1
2200.00	-1.3	-1.5	-13.7	-15.7	1.0	0.5	0.9
2300.00	-1.3	-1.5	-13.6	-16.0	1.0	0.5	1.0
2400.00	-1.4	-1.5	-13.6	-16.4	1.0	0.5	1.3
2500.00	-1.4	-1.6	-13.6	-16.9	1.0	0.5	1.4
2600.00	-1.4	-1.6	-13.7	-17.6	1.0	0.5	1.5
2700.00	-1.4	-1.7	-13.9	-18.5	1.0	0.6	1.4
2800.00	-1.4	-1.8	-14.2	-19.6	1.1	0.6	1.6
2900.00	-1.4	-1.8	-14.4	-20.6	1.1	0.6	1.5
3000.00	-1.4	-1.8	-14.5	-21.9	1.1	0.6	1.7
3100.00	-1.4	-1.8	-14.6	-23.8	1.1	0.6	1.1
3200.00	-1.5	-1.8	-14.6	-26.2	1.1	0.6	1.2
3300.00	-1.5	-1.8	-14.6	-28.9	1.1	0.6	1.2
3400.00	-1.5	-1.7	-14.7	-32.3	1.1	0.6	1.8
3500.00	-1.5	-1.7	-14.7	-33.1	1.1	0.6	1.2
3600.00	-1.5	-1.7	-14.6	-28.6	1.1	0.6	1.4
3700.00	-1.5	-1.7	-14.5	-25.5	1.1	0.6	1.2
3800.00	-1.5	-1.8	-14.3	-23.2	1.1	0.6	1.1
3900.00	-1.5	-1.8	-14.1	-21.3	1.1	0.6	1.4
4000.00	-1.6	-1.8	-13.8	-19.5	1.1	0.6	1.5
4100.00	-1.6	-1.8	-13.4	-18.1	1.1	0.6	1.1
4200.00	-1.6	-1.8	-13.1	-17.0	1.1	0.6	1.6
4300.00	-1.6	-1.9	-12.8	-16.0	1.1	0.6	1.2
4400.00	-1.6	-1.9	-12.5	-15.1	1.1	0.6	1.3
4500.00	-1.7	-1.9	-12.2	-14.5	1.1	0.6	1.5
4600.00	-1.7	-2.0	-12.0	-13.9	1.1	0.6	1.2
4700.00	-1.7	-2.0	-11.7	-13.3	1.1	0.6	1.7
4800.00	-1.7	-2.0	-11.5	-13.0	1.1	0.6	1.3
4900.00	-1.7	-2.1	-11.4	-12.7	1.1	0.6	1.1
5000.00	-1.7	-2.1	-11.2	-12.3	1.1	0.6	1.1
5100.00	-1.7	-2.1	-11.1	-12.1	1.1	0.6	1.1
5200.00	-1.7	-2.1	-11.0	-11.9	1.1	0.6	1.6
5300.00	-1.7	-2.2	-11.0	-11.8	1.1	0.6	1.7
5400.00	-1.7	-2.2	-11.0	-11.7	1.1	0.6	1.2
5500.00	-1.7	-2.2	-10.9	-11.4	1.1	0.5	1.7
5600.00	-1.7	-2.2	-11.0	-11.4	1.1	0.5	1.5
5700.00	-1.7	-2.2	-11.0	-11.4	1.1	0.6	1.5
5800.00	-1.7	-2.1	-11.1	-11.3	1.1	0.5	1.6
5900.00	-1.7	-2.2	-11.4	-11.5	1.1	0.5	1.6
6000.00	-1.7	-2.1	-11.4	-11.3	1.1	0.5	1.6
6100.00	-1.6	-2.1	-11.7	-11.5	1.1	0.5	1.2
6200.00	-1.6	-2.1	-11.9	-11.7	1.1	0.5	0.8
6300.00	-1.6	-2.1	-12.0	-11.6	1.1	0.5	1.2
6400.00	-1.6	-2.1	-12.4	-11.9	1.1	0.5	1.2
6500.00	-1.6	-2.1	-12.5	-11.9	1.1	0.5	1.4
6600.00	-1.6	-2.1	-12.6	-11.8	1.1	0.5	1.8
6700.00	-1.5	-2.1	-12.9	-12.1	1.1	0.5	0.9
6800.00	-1.6	-2.1	-13.0	-12.1	1.1	0.5	1.0
6900.00	-1.6	-2.1	-13.1	-12.1	1.1	0.5	0.9
7000.00	-1.6	-2.1	-13.2	-12.1	1.1	0.5	0.8
7100.00	-1.6	-2.2	-13.0	-11.9	1.1	0.5	1.2
7200.00	-1.6	-2.2	-12.9	-11.9	1.1	0.5	1.9
7300.00	-1.7	-2.2	-12.8	-11.7	1.1	0.6	0.7
7400.00	-1.8	-2.3	-12.4	-11.3	1.1	0.6	1.3
7500.00	-1.8	-2.3	-12.1	-11.2	1.1	0.6	2.0
7600.00	-1.9	-2.4	-11.8	-10.9	1.1	0.6	1.4
7700.00	-2.0	-2.5	-11.1	-10.4	1.1	0.6	2.0
7800.00	-2.1	-2.6	-10.8	-10.2	1.1	0.6	1.5
7900.00	-2.3	-2.8	-10.3	-9.6	1.1	0.6	2.3
8000.00	-2.3	-2.8	-9.6	-9.1	1.1	0.6	1.9

TEST CONDITIONS: $V_{DD} = +5.0$ V, $V_{EN} = 0$ V, $I_{DD} = 3$ mA, $I_{EN} = 0$ mA @ Temperature = -45°C

FREQ (MHz)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
400.0	43.1	43.3	43.7	43.8	41.2	32.4	23.6
1000.0	41.9	43.6	45.2	42.7	32.2	22.4	16.5
2000.0	43.2	44.9	46.2	45.9	41.2	30.6	20.1
4000.0	41.2	42.4	43.5	44.2	44.3	42.9	34.8
6000.0	43.6	44.3	45.2	46.1	46.4	43.5	32.6
8000.0	42.7	43.6	44.7	45.6	45.7	43.3	33.5

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	70.6	70.5	70.3	70.0	69.6	68.2	59.3
1000.0	70.9	71.1	71.3	71.7	71.8	63.7	52.1
2000.0	70.8	70.7	70.7	70.9	70.9	69.7	58.7
4000.0	71.9	71.8	71.8	71.8	71.9	71.9	71.6
6000.0	74.2	74.2	74.1	73.8	73.6	73.0	71.4
8000.0	84.8	84.7	84.7	84.7	84.6	84.4	83.4

FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
400.0	16.3	13.5
1000.0	13.7	11.8
2000.0	15.4	13.1
4000.0	18.0	15.6
6000.0	18.8	15.9
8000.0	18.7	15.2



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IF/RF MICROWAVE COMPONENTS

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +5.0 V, V_{EN} = 0 V, I_{DD} = 3 mA, I_{EN} = 0 mA @ Temperature = -45°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)	FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
					K	Measure				
5500.00	-1.5	-2.0	-21.5	-18.7	1.1	0.6	1.6	5500.0	17.9	15.1
5600.00	-1.5	-2.0	-22.2	-19.0	1.1	0.6	1.3	6000.0	18.7	16.0
5700.00	-1.5	-2.0	-21.9	-18.9	1.1	0.6	1.3	7000.0	20.5	17.2
5800.00	-1.5	-2.0	-21.2	-18.3	1.1	0.6	1.4	8000.0	20.9	15.7
5900.00	-1.5	-2.0	-19.9	-17.6	1.1	0.6	1.4	8500.0	19.8	14.4
6000.00	-1.5	-2.0	-18.9	-16.7	1.1	0.6	1.2			
6100.00	-1.5	-2.0	-17.5	-15.7	1.1	0.6	1.2			
6200.00	-1.5	-2.1	-16.5	-14.9	1.1	0.6	1.4			
6300.00	-1.5	-2.1	-15.3	-14.0	1.1	0.6	1.5			
6400.00	-1.6	-2.2	-14.4	-13.3	1.1	0.6	1.2			
6500.00	-1.6	-2.2	-13.5	-12.5	1.1	0.6	1.2			
6600.00	-1.7	-2.3	-12.7	-11.8	1.1	0.6	1.4			
6700.00	-1.7	-2.3	-11.8	-11.1	1.1	0.6	1.3			
6800.00	-1.8	-2.4	-11.1	-10.6	1.1	0.6	1.7			
6900.00	-1.9	-2.5	-10.4	-9.9	1.1	0.6	1.8			
7000.00	-2.0	-2.6	-9.8	-9.4	1.1	0.6	1.7			
7100.00	-2.1	-2.7	-9.1	-8.8	1.1	0.6	1.3			
7200.00	-2.3	-2.9	-8.6	-8.3	1.1	0.6	1.6			
7300.00	-2.4	-3.0	-8.0	-7.8	1.1	0.6	1.9			
7400.00	-2.5	-3.1	-7.5	-7.4	1.1	0.6	1.4			
7500.00	-2.7	-3.3	-7.0	-6.9	1.1	0.6	1.8			
7600.00	-2.9	-3.5	-6.6	-6.6	1.1	0.6	1.6			
7700.00	-3.1	-3.6	-6.1	-6.1	1.1	0.6	1.1			
7800.00	-3.2	-3.8	-5.8	-5.9	1.1	0.6	1.5			
7900.00	-3.4	-4.0	-5.4	-5.5	1.1	0.5	2.1			
8000.00	-3.6	-4.2	-5.1	-5.3	1.1	0.5	2.1			
8100.00	-3.8	-4.4	-4.8	-4.9	1.1	0.5	1.7			
8200.00	-4.0	-4.6	-4.6	-4.8	1.1	0.5	2.3			
8300.00	-4.2	-4.7	-4.2	-4.4	1.1	0.5	1.4			
8400.00	-4.4	-5.0	-4.1	-4.3	1.1	0.5	1.5			
8500.00	-4.6	-5.1	-3.8	-4.0	1.1	0.5	1.7			

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
5500.0	70.6	70.6	70.4	70.2	69.9	69.2	66.9	41.1	41.8	42.4	41.6	41.8	41.8	39.9
6000.0	77.6	77.4	77.4	77.1	76.9	76.6	76.1	39.7	40.7	41.1	42.4	42.5	42.2	36.1
7000.0	90.5	90.5	90.3	90.2	90.0	89.7	89.1	38.6	39.9	40.4	42.8	42.9	42.2	36.7
8000.0	84.8	84.8	84.8	84.8	84.7	84.6	84.6	40.9	41.5	42.2	40.6	40.6	40.5	39.8
8500.0	91.4	91.2	91.2	91.0	90.8	92.4	92.0	45.0	45.3	46.3	47.4	50.6	38.4	24.7



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +5.25 V, V_{EN} = +5.25 V, I_{DD} = 88 mA, I_{EN} = 2.33 mA @ Temperature = - 45°C

FREQ (GHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure										
200.00	15.7	-33.7	-1.8	-4.0	1.4	0.9	20.0	21.8	3.6	30.4	33.7	33.1	33.4	32.9	32.9	32.3
300.00	20.6	-28.8	-5.8	-8.2	1.2	0.8	20.1	21.7	1.8	32.9	33.4	33.7	33.8	33.2	33.0	32.4
400.00	22.0	-27.3	-12.4	-13.7	1.1	0.7	20.6	22.2	1.4	33.6	32.2	36.1	34.4	34.8	34.2	33.7
500.00	22.4	-27.0	-17.8	-14.9	1.1	0.6	21.0	22.4	1.2	33.7	34.6	35.1	35.1	35.3	35.0	34.4
600.00	22.4	-27.0	-17.0	-13.8	1.1	0.6	21.3	22.6	1.1	32.6	34.7	36.9	36.2	35.5	35.7	35.1
700.00	22.4	-27.0	-15.3	-13.0	1.1	0.6	21.5	22.8	1.0	35.5	33.4	35.9	34.7	35.0	34.5	33.9
800.00	22.4	-27.0	-14.3	-12.7	1.1	0.6	21.6	22.9	1.0	34.0	35.4	36.0	35.4	35.5	35.2	34.9
900.00	22.4	-27.1	-13.9	-12.6	1.1	0.6	21.7	23.0	1.0	34.7	36.2	36.0	36.0	35.1	35.1	34.6
1000.00	22.4	-27.1	-13.7	-12.7	1.1	0.6	21.8	23.1	1.0	35.3	35.2	35.2	35.1	35.1	35.0	34.6
1100.00	22.4	-27.1	-13.7	-13.0	1.1	0.6	21.7	23.1	1.0	35.2	35.1	35.3	35.1	35.2	34.8	34.5
1200.00	22.4	-27.1	-13.9	-13.4	1.1	0.6	21.8	23.2	1.0	34.2	34.8	34.1	34.7	34.5	34.0	34.0
1300.00	22.4	-27.1	-14.1	-13.9	1.1	0.6	21.8	23.2	1.0	33.2	33.9	34.0	34.4	34.4	34.0	33.7
1400.00	22.4	-27.2	-14.5	-14.6	1.1	0.6	21.7	23.1	1.0	35.6	33.4	34.6	34.7	34.3	34.1	33.7
1500.00	22.5	-27.2	-14.9	-15.5	1.1	0.6	21.6	23.2	1.0	33.5	33.6	34.0	33.3	33.1	32.7	32.7
1600.00	22.5	-27.2	-15.3	-16.5	1.1	0.7	21.7	23.2	1.0	33.7	33.4	33.6	33.3	33.1	32.8	32.8
1700.00	22.5	-27.2	-15.5	-17.4	1.1	0.7	21.7	23.4	1.1	34.3	35.0	33.7	33.4	33.2	33.1	32.9
1800.00	22.5	-27.3	-16.0	-18.9	1.1	0.7	21.5	23.3	1.1	36.0	32.7	34.5	32.9	33.2	32.9	32.7
1900.00	22.6	-27.4	-16.4	-21.0	1.1	0.7	21.5	23.2	1.1	31.8	32.7	32.7	32.6	32.4	32.4	32.1
2000.00	22.6	-27.3	-16.5	-23.4	1.1	0.7	21.2	23.1	1.1	31.5	33.7	33.2	32.9	32.6	32.7	32.4
2100.00	22.6	-27.4	-16.4	-26.3	1.1	0.7	21.5	23.3	1.1	32.0	34.2	32.8	33.1	32.6	32.5	32.3
2200.00	22.6	-27.4	-16.2	-29.9	1.1	0.7	21.4	23.3	1.1	33.6	33.2	32.4	32.6	32.8	32.6	32.3
2300.00	22.6	-27.5	-15.9	-32.6	1.2	0.7	21.4	23.4	1.1	32.1	32.7	32.6	32.6	32.5	32.5	32.3
2400.00	22.6	-27.6	-15.5	-30.9	1.2	0.7	21.2	23.6	1.2	30.8	30.8	30.8	30.8	30.6	30.2	30.2
2500.00	22.6	-27.7	-15.3	-28.4	1.2	0.7	21.2	23.7	1.2	30.1	30.9	30.5	30.9	30.7	30.4	30.1
2600.00	22.6	-27.8	-14.9	-25.6	1.2	0.7	20.9	23.7	1.2	30.1	31.3	30.8	30.7	30.5	30.5	30.2
2700.00	22.6	-27.8	-14.5	-23.5	1.2	0.7	20.5	23.3	1.3	31.4	30.9	30.7	31.0	30.6	30.5	30.3
2800.00	22.5	-28.0	-14.1	-22.0	1.2	0.8	20.4	23.0	1.2	31.2	30.2	30.1	30.4	30.2	30.0	29.6
2900.00	22.5	-28.0	-13.6	-20.4	1.2	0.8	20.1	22.8	1.3	30.3	31.2	30.9	30.7	30.3	30.0	29.8
3000.00	22.5	-28.1	-13.1	-19.1	1.2	0.8	20.3	23.0	1.3	30.9	29.4	29.8	29.3	29.2	28.9	28.4
3100.00	22.5	-28.1	-12.6	-18.3	1.2	0.8	20.2	23.3	1.3	28.5	30.1	29.2	29.3	29.0	28.8	28.4
3200.00	22.5	-28.1	-12.2	-17.7	1.2	0.8	20.2	23.3	1.3	29.6	29.9	29.8	29.7	29.6	29.5	29.2
3300.00	22.5	-28.1	-12.0	-17.4	1.2	0.8	20.2	23.2	1.2	29.7	29.2	29.5	29.3	29.2	28.9	28.6
3400.00	22.5	-28.1	-11.8	-16.9	1.2	0.8	20.0	23.0	1.3	28.1	30.0	29.8	29.7	29.6	29.3	29.1
3500.00	22.5	-28.2	-11.8	-16.8	1.2	0.8	20.2	23.1	1.3	28.9	29.4	29.1	29.2	29.1	28.9	28.6
3600.00	22.5	-28.2	-11.8	-17.1	1.2	0.8	20.1	23.0	1.2	28.8	29.5	29.0	29.3	29.1	29.0	28.8
3700.00	22.5	-28.3	-11.8	-17.2	1.2	0.8	20.1	23.3	1.2	29.4	29.9	30.5	30.2	30.2	30.1	30.1
3800.00	22.5	-28.3	-11.9	-17.4	1.2	0.8	20.2	23.4	1.2	29.0	29.2	29.8	29.6	29.7	29.5	29.5
3900.00	22.6	-28.3	-11.9	-17.6	1.2	0.8	20.6	23.5	1.2	30.1	29.6	29.1	29.5	29.6	29.4	29.3
4000.00	22.6	-28.3	-12.0	-18.0	1.2	0.8	20.8	23.6	1.2	30.0	29.3	29.5	29.8	29.7	29.7	29.5
4100.00	22.6	-28.3	-12.3	-18.6	1.2	0.8	21.1	23.8	1.2	29.4	28.6	29.1	29.2	29.3	29.2	29.0
4200.00	22.7	-28.4	-12.5	-19.3	1.2	0.8	21.1	23.6	1.2	29.1	29.1	29.1	29.4	29.5	29.4	29.3
4300.00	22.7	-28.4	-12.8	-19.8	1.2	0.8	21.1	23.8	1.2	29.8	29.8	29.9	29.7	29.6	29.5	29.4
4400.00	22.7	-28.4	-13.3	-20.9	1.2	0.8	21.0	23.9	1.2	29.8	29.2	29.4	29.5	29.6	29.5	29.4
4500.00	22.8	-28.5	-13.6	-21.9	1.2	0.8	20.9	24.3	1.2	29.5	28.8	29.2	29.3	29.1	29.2	29.0
4600.00	22.8	-28.6	-14.2	-22.5	1.2	0.8	20.6	24.4	1.2	28.2	29.0	28.7	29.2	29.0	28.9	28.7
4700.00	22.8	-28.5	-14.7	-24.5	1.2	0.8	20.7	24.2	1.1	29.6	29.5	29.0	28.9	29.1	29.0	28.9
4800.00	22.9	-28.6	-15.2	-25.4	1.2	0.8	20.9	23.9	1.2	29.6	29.0	29.2	29.2	29.3	29.3	29.3
4900.00	22.9	-28.7	-16.2	-25.6	1.2	0.8	20.6	23.8	1.2	27.7	28.1	28.5	28.2	28.3	28.2	28.0
5000.00	23.0	-28.6	-16.6	-27.4	1.2	0.8	20.7	23.7	1.3	27.7	27.9	28.0	27.8	27.7	27.7	27.5
5100.00	23.0	-28.8	-17.6	-28.0	1.3	0.8	21.0	23.5	1.1	27.7	27.3	27.4	27.4	27.8	27.8	27.9
5200.00	23.0	-28.8	-18.9	-28.0	1.3	0.8	21.0	23.4	1.2	27.2	27.7	28.0	28.1	28.3	28.4	28.6
5300.00	23.1	-28.8	-19.3	-29.0	1.3	0.8	21.1	23.8	1.2	28.1	28.2	28.1	28.4	28.5	28.7	28.9
5400.00	23.1	-29.1	-21.3	-27.7	1.3	0.8	20.9	24.1	1.2	27.8	27.7	27.7	27.9	28.0	28.1	28.1
5500.00	23.1	-28.9	-22.2	-28.3	1.3	0.8	20.6	24.0	1.2	27.2	27.4	27.5	27.7	27.8	27.7	27.7
5600.00	23.2	-29.0	-21.9	-30.3	1.3	0.8	19.8	23.9	1.2	27.4	27.3	27.6	27.5	27.5	27.5	27.4
5700.00	23.1	-29.2	-24.5	-27.2	1.3	0.8	19.6	23.7	1.2	27.0	27.3	27.5	27.5	27.5	27.5	27.3
5800.00	23.3	-29.0	-23.1	-29.8	1.3	0.8	19.6	23.5	1.2	26.6	27.0	26.8	27.0	27.0	26.9	26.7
5900.00	23.3	-29.3	-21.0	-27.7	1.3	0.8	19.5	23.5	1.2	26.6	26.5	26.4	26.6	26.6	26.7	26.5
6000.00	23.1	-29.2	-22.0	-26.5	1.3	0.8	18.7	23.4	1.3	25.7	25.4	25.6	25.5	25.5	25.3	25.3
6100.00	23.4	-29.3	-18.7	-27.1	1.3	0.8	18.9	23.1	1.2	25.6	25.3	25.4	25.4	25.5	25.7	25.7
6200.00	23.3	-29.6	-16.8	-22.7	1.3	0.8	18.7	22.5	1.3	24.6	24.9	24.9	24.9	25.0	25.1	25.5
6300.00	23.3	-29.4	-16.5	-22.9	1.3	0.8	18.6	21.8	1.3	25.3	24.8	25.0	25.1	25.3	25.6	26.0
6400.00	23.4	-29.7	-14.1	-20.2												

TEST CONDITIONS: $V_{DD} = +5.25$ V, $V_{EN} = +5.25$ V, $I_{DD} = 88$ mA, $I_{EN} = 2.33$ mA @ Temperature = -45°C

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	42.4	42.2	42.2	42.1	42.0	41.7	41.3
1000.0	40.4	40.4	40.2	40.2	40.1	40.0	39.8
2000.0	38.0	37.9	37.9	37.8	37.8	37.8	37.8
4000.0	38.7	38.7	38.7	38.7	38.9	39.2	39.6
6000.0	29.3	29.2	29.2	29.1	29.2	29.2	29.3
8000.0	35.0	35.0	35.0	35.2	35.8	36.9	39.0

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +5.25\text{ V}$, $V_{EN} = +5.25\text{ V}$, $I_{DD} = 96\text{ mA}$, $I_{EN} = 2.31\text{ mA}$ @ Temperature = -45°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure (dBm)										
5500.00	22.6	-29.8	-11.5	-10.5	1.3	0.7	20.4	23.8	1.1	28.1	28.2	28.3	28.5	28.6	28.4	28.4
5600.00	22.7	-29.8	-11.3	-10.7	1.3	0.7	20.0	23.7	1.1	26.6	27.2	27.1	27.3	27.2	27.0	27.0
5700.00	22.7	-29.8	-11.8	-10.9	1.3	0.7	19.8	23.7	1.1	27.1	27.3	27.4	27.5	27.5	27.3	27.3
5800.00	22.8	-29.8	-11.5	-11.1	1.3	0.7	19.7	23.6	1.1	26.9	27.1	27.1	27.2	27.3	27.4	27.2
5900.00	22.8	-29.7	-12.0	-11.4	1.3	0.8	19.0	23.5	1.1	26.7	27.2	26.6	26.7	26.7	26.4	26.4
6000.00	22.9	-29.8	-11.6	-11.5	1.3	0.8	18.1	23.1	1.1	25.1	25.0	24.9	25.0	25.0	24.8	24.2
6100.00	22.9	-29.8	-12.1	-11.9	1.3	0.8	19.0	23.1	1.1	25.1	25.6	25.4	25.6	25.6	25.4	25.4
6200.00	23.1	-29.9	-11.8	-11.9	1.3	0.8	19.1	22.9	1.1	24.3	25.0	24.6	24.8	24.9	25.0	25.2
6300.00	23.1	-29.9	-12.2	-12.3	1.3	0.8	19.7	22.9	1.1	25.0	25.6	25.4	25.6	25.8	26.1	26.5
6400.00	23.2	-30.0	-11.9	-12.2	1.3	0.8	19.8	22.8	1.1	25.4	25.6	25.5	25.6	25.8	26.2	26.8
6500.00	23.2	-29.9	-12.4	-12.8	1.3	0.8	19.7	22.5	1.1	25.1	25.3	25.5	25.7	26.1	26.4	27.0
6600.00	23.3	-30.3	-12.2	-12.7	1.3	0.8	20.0	22.5	1.1	25.8	25.5	25.8	25.9	26.3	26.6	27.1
6700.00	23.3	-30.1	-12.9	-13.4	1.3	0.8	19.9	22.2	1.2	25.2	25.8	25.6	25.9	26.2	26.7	27.3
6800.00	23.4	-30.4	-12.8	-13.3	1.3	0.8	20.0	22.1	1.2	25.4	25.9	26.0	26.3	26.6	27.1	27.6
6900.00	23.4	-30.3	-13.5	-14.1	1.3	0.8	20.2	22.1	1.2	26.2	26.1	26.2	26.6	26.9	27.4	28.1
7000.00	23.5	-30.6	-13.5	-14.0	1.3	0.8	20.3	22.1	1.2	25.5	25.5	25.9	26.1	26.5	27.0	27.7
7100.00	23.5	-30.6	-14.5	-15.0	1.4	0.8	20.3	22.0	1.2	25.5	25.7	26.3	26.4	26.8	27.3	27.9
7200.00	23.6	-30.9	-14.7	-15.0	1.4	0.8	20.5	22.2	1.3	25.5	25.9	26.1	26.3	26.7	27.3	28.0
7300.00	23.6	-31.0	-16.1	-16.2	1.4	0.8	20.4	22.1	1.3	25.5	25.9	25.6	25.9	26.4	27.0	27.8
7400.00	23.7	-31.2	-16.4	-16.3	1.4	0.8	20.7	22.3	1.4	25.4	25.1	25.5	25.9	26.4	27.0	27.9
7500.00	23.6	-31.4	-18.4	-18.0	1.5	0.8	20.2	21.8	1.4	25.2	25.4	25.5	25.9	26.4	27.1	28.0
7600.00	23.7	-31.9	-18.4	-18.0	1.5	0.9	20.3	21.8	1.5	25.3	25.3	25.4	25.8	26.2	26.9	27.7
7700.00	23.6	-32.0	-21.2	-20.4	1.6	0.9	20.5	21.9	1.5	23.7	24.3	24.4	24.9	25.3	26.0	27.0
7800.00	23.7	-32.6	-19.2	-20.5	1.6	0.9	20.0	21.5	1.6	24.8	25.1	25.2	25.5	26.0	26.7	27.8
7900.00	23.4	-32.8	-21.0	-25.3	1.7	0.9	19.7	21.2	1.7	25.0	25.2	25.2	25.4	25.9	26.7	27.8
8000.00	23.3	-33.9	-16.8	-24.5	1.9	0.9	19.3	20.7	1.8	23.9	24.0	24.4	24.8	25.4	26.4	27.7
8100.00	23.1	-33.9	-16.7	-30.1	1.9	0.9	19.3	20.6	1.9	23.7	23.9	24.1	24.5	25.2	26.2	27.4
8200.00	22.7	-35.6	-12.5	-20.6	2.3	1.0	18.9	20.2	2.0	22.6	23.1	23.8	24.5	25.6	25.6	27.0
8300.00	22.4	-35.5	-12.4	-19.7	2.3	1.0	19.0	20.2	2.2	23.2	23.4	23.4	24.0	24.7	25.8	27.2
8400.00	21.6	-38.1	-9.1	-13.9	3.0	1.1	18.7	19.8	2.3	23.1	22.9	23.3	23.9	24.5	25.7	27.3
8500.00	21.4	-37.7	-8.8	-13.0	2.9	1.1	18.2	19.3	2.5	21.5	21.9	22.6	23.4	24.7	26.2	

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
5500.0	36.8	36.7	36.6	36.6	36.5	36.6	36.6
6000.0	31.5	31.4	31.3	31.2	31.1	31.1	31.0
7000.0	40.8	40.6	40.5	40.4	40.3	40.4	40.6
8000.0	49.5	49.4	49.3	49.1	49.0	49.1	49.4
8500.0	58.9	58.7	58.5	58.4	58.4	58.6	59.5



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +5.25$ V, $V_{EN} = 0$ V, $I_{DD} = 3$ mA, $I_{EN} = 0$ mA @ Temperature = -45°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	K	Stability Measure	Noise Figure (dB)
200.00	-3.6	-3.7	-3.9	-8.4	1.1	0.8	2.7
300.00	-2.2	-2.3	-6.6	-11.2	1.0	0.6	1.4
400.00	-1.7	-1.7	-9.2	-13.4	1.0	0.5	1.1
500.00	-1.3	-1.4	-11.8	-15.2	1.0	0.5	1.0
600.00	-1.2	-1.2	-14.8	-17.0	1.0	0.4	0.8
700.00	-1.1	-1.2	-18.1	-18.3	1.0	0.4	1.0
800.00	-1.1	-1.1	-22.2	-18.7	1.0	0.4	1.0
900.00	-1.1	-1.1	-27.8	-18.5	1.0	0.4	1.0
1000.00	-1.0	-1.1	-35.0	-18.1	1.0	0.4	0.9
1100.00	-1.0	-1.1	-28.5	-17.6	1.0	0.4	0.5
1200.00	-1.1	-1.1	-23.9	-17.2	1.0	0.4	0.8
1300.00	-1.1	-1.1	-21.1	-16.7	1.0	0.4	0.8
1400.00	-1.1	-1.2	-19.0	-16.2	1.0	0.4	0.8
1500.00	-1.1	-1.2	-17.6	-15.7	1.0	0.4	1.0
1600.00	-1.2	-1.2	-16.5	-15.5	1.0	0.4	1.0
1700.00	-1.2	-1.3	-15.7	-15.6	1.0	0.4	1.0
1800.00	-1.2	-1.3	-14.9	-15.5	1.0	0.4	1.0
1900.00	-1.2	-1.4	-14.5	-15.3	1.0	0.5	0.9
2000.00	-1.3	-1.4	-14.1	-15.2	1.0	0.5	1.1
2100.00	-1.3	-1.4	-13.9	-15.4	1.0	0.5	0.7
2200.00	-1.3	-1.5	-13.7	-15.7	1.0	0.5	1.1
2300.00	-1.4	-1.5	-13.6	-16.0	1.0	0.5	1.1
2400.00	-1.4	-1.6	-13.6	-16.4	1.0	0.5	1.2
2500.00	-1.4	-1.6	-13.5	-16.9	1.0	0.5	1.3
2600.00	-1.4	-1.6	-13.6	-17.6	1.0	0.5	1.4
2700.00	-1.4	-1.7	-13.8	-18.5	1.0	0.6	0.9
2800.00	-1.4	-1.8	-14.1	-19.6	1.1	0.6	1.2
2900.00	-1.4	-1.8	-14.3	-20.6	1.1	0.6	1.3
3000.00	-1.5	-1.9	-14.4	-21.8	1.1	0.6	1.9
3100.00	-1.5	-1.8	-14.5	-23.7	1.1	0.6	1.0
3200.00	-1.5	-1.8	-14.5	-26.1	1.1	0.6	1.3
3300.00	-1.5	-1.8	-14.5	-28.6	1.1	0.6	1.3
3400.00	-1.5	-1.8	-14.6	-31.3	1.1	0.6	1.3
3500.00	-1.5	-1.8	-14.6	-32.0	1.1	0.6	1.6
3600.00	-1.5	-1.8	-14.5	-28.3	1.1	0.6	1.6
3700.00	-1.5	-1.8	-14.4	-25.3	1.1	0.6	1.2
3800.00	-1.5	-1.8	-14.1	-23.1	1.1	0.6	1.1
3900.00	-1.6	-1.8	-14.0	-21.2	1.1	0.6	1.1
4000.00	-1.6	-1.8	-13.7	-19.5	1.1	0.6	1.3
4100.00	-1.6	-1.8	-13.4	-18.1	1.1	0.6	1.4
4200.00	-1.6	-1.9	-13.0	-17.0	1.1	0.6	1.3
4300.00	-1.6	-1.9	-12.8	-16.0	1.1	0.6	1.1
4400.00	-1.7	-1.9	-12.4	-15.1	1.1	0.6	1.3
4500.00	-1.7	-1.9	-12.2	-14.5	1.1	0.6	1.5
4600.00	-1.7	-2.0	-12.0	-13.9	1.1	0.6	0.9
4700.00	-1.7	-2.0	-11.7	-13.3	1.1	0.6	1.3
4800.00	-1.7	-2.0	-11.5	-13.0	1.1	0.6	1.3
4900.00	-1.8	-2.1	-11.4	-12.7	1.1	0.6	1.6
5000.00	-1.7	-2.1	-11.2	-12.3	1.1	0.6	1.7
5100.00	-1.8	-2.1	-11.1	-12.1	1.1	0.6	1.2
5200.00	-1.8	-2.2	-11.0	-11.9	1.1	0.6	3.1
5300.00	-1.7	-2.2	-11.0	-11.8	1.1	0.6	2.1
5400.00	-1.8	-2.2	-11.0	-11.7	1.1	0.6	1.2
5500.00	-1.8	-2.2	-10.9	-11.4	1.1	0.6	1.5
5600.00	-1.7	-2.2	-11.0	-11.4	1.1	0.6	1.3
5700.00	-1.8	-2.2	-11.1	-11.4	1.1	0.6	1.4
5800.00	-1.7	-2.2	-11.1	-11.3	1.1	0.5	1.4
5900.00	-1.7	-2.2	-11.4	-11.5	1.1	0.5	1.4
6000.00	-1.7	-2.2	-11.4	-11.3	1.1	0.5	1.6
6100.00	-1.6	-2.1	-11.7	-11.5	1.1	0.5	1.3
6200.00	-1.6	-2.1	-12.0	-11.7	1.1	0.5	1.0
6300.00	-1.6	-2.1	-12.0	-11.6	1.1	0.5	1.6
6400.00	-1.6	-2.1	-12.4	-11.8	1.1	0.5	1.7
6500.00	-1.6	-2.1	-12.5	-11.8	1.1	0.5	1.3
6600.00	-1.6	-2.1	-12.6	-11.8	1.1	0.5	1.5
6700.00	-1.6	-2.1	-13.0	-12.1	1.1	0.5	1.1
6800.00	-1.6	-2.1	-13.1	-12.1	1.1	0.5	1.2
6900.00	-1.6	-2.1	-13.1	-12.1	1.1	0.5	1.2
7000.00	-1.6	-2.1	-13.2	-12.1	1.1	0.5	1.8
7100.00	-1.7	-2.2	-13.0	-11.9	1.1	0.6	1.2
7200.00	-1.6	-2.2	-12.9	-11.9	1.1	0.6	1.8
7300.00	-1.7	-2.3	-12.8	-11.7	1.1	0.6	1.5
7400.00	-1.8	-2.3	-12.4	-11.4	1.1	0.6	1.8
7500.00	-1.8	-2.3	-12.1	-11.2	1.1	0.6	1.8
7600.00	-1.9	-2.5	-11.8	-10.9	1.1	0.6	2.2
7700.00	-2.0	-2.5	-11.1	-10.5	1.1	0.6	0.8
7800.00	-2.1	-2.6	-10.8	-10.2	1.1	0.6	1.4
7900.00	-2.3	-2.8	-10.3	-9.6	1.1	0.6	1.5
8000.00	-2.3	-2.8	-9.5	-9.1	1.1	0.6	1.8



TEST CONDITIONS: $V_{DD} = +5.25$ V, $V_{EN} = 0$ V, $I_{DD} = 3$ mA, $I_{EN} = 0$ mA @ Temperature = -45°C

FREQ (MHz)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
400.0	42.5	43.3	43.5	43.4	40.5	31.9	23.3
1000.0	41.9	43.2	44.7	42.1	31.5	21.9	16.5
2000.0	42.9	44.5	45.7	45.7	40.8	30.1	20.0
4000.0	41.4	42.0	42.9	43.7	44.1	42.3	34.0
6000.0	43.0	44.0	44.7	45.8	46.1	42.7	31.3
8000.0	45.9	46.6	47.0	47.1	46.7	43.2	32.5

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	70.1	70.0	69.8	69.6	69.2	67.7	58.6
1000.0	70.8	70.9	71.2	71.5	71.4	62.8	52.1
2000.0	70.5	70.4	70.4	70.5	70.6	69.3	58.1
4000.0	71.7	71.6	71.6	71.7	71.7	71.7	71.4
6000.0	74.0	74.0	74.0	73.8	73.5	73.0	71.2
8000.0	84.6	84.6	84.6	84.6	84.5	84.3	83.2

FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
400.0	16.3	13.4
1000.0	13.7	11.7
2000.0	15.2	13.1
4000.0	18.0	15.5
6000.0	18.6	15.8
8000.0	18.5	15.1



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +5.25 V, V_{EN} = 0 V, I_{DD} = 3 mA, I_{EN} = 0 mA @ Temperature = -45°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)	FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
					K	Measure				
5500.00	-1.5	-2.0	-21.4	-18.7	1.1	0.6	1.5	5500.0	17.7	15.0
5600.00	-1.5	-2.0	-22.2	-18.9	1.1	0.6	1.6	6000.0	18.7	15.8
5700.00	-1.5	-2.0	-21.9	-18.9	1.1	0.6	1.5	7000.0	20.5	16.9
5800.00	-1.5	-2.0	-21.1	-18.2	1.1	0.6	1.2	8000.0	20.7	15.6
5900.00	-1.5	-2.0	-19.9	-17.5	1.1	0.6	1.0	8500.0	19.6	14.3
6000.00	-1.5	-2.0	-18.9	-16.7	1.1	0.6	1.2			
6100.00	-1.5	-2.1	-17.5	-15.7	1.1	0.6	1.6			
6200.00	-1.5	-2.1	-16.5	-14.9	1.1	0.6	1.5			
6300.00	-1.5	-2.1	-15.3	-14.0	1.1	0.6	1.5			
6400.00	-1.6	-2.2	-14.4	-13.3	1.1	0.6	1.4			
6500.00	-1.6	-2.2	-13.5	-12.5	1.1	0.6	1.5			
6600.00	-1.7	-2.3	-12.7	-11.9	1.1	0.6	1.3			
6700.00	-1.7	-2.4	-11.8	-11.1	1.1	0.6	1.4			
6800.00	-1.8	-2.4	-11.1	-10.6	1.1	0.6	1.4			
6900.00	-1.9	-2.5	-10.4	-9.9	1.1	0.6	1.4			
7000.00	-2.0	-2.6	-9.8	-9.4	1.1	0.6	1.7			
7100.00	-2.1	-2.7	-9.1	-8.8	1.1	0.6	1.5			
7200.00	-2.3	-2.9	-8.6	-8.3	1.1	0.6	1.5			
7300.00	-2.4	-3.0	-8.0	-7.8	1.1	0.6	1.4			
7400.00	-2.6	-3.2	-7.5	-7.4	1.1	0.6	1.7			
7500.00	-2.7	-3.3	-7.0	-6.9	1.1	0.6	1.6			
7600.00	-2.9	-3.5	-6.6	-6.6	1.1	0.6	1.4			
7700.00	-3.1	-3.6	-6.1	-6.1	1.1	0.6	1.8			
7800.00	-3.2	-3.8	-5.8	-5.9	1.1	0.6	1.6			
7900.00	-3.4	-4.0	-5.4	-5.5	1.1	0.5	1.9			
8000.00	-3.6	-4.2	-5.2	-5.3	1.1	0.6	2.1			
8100.00	-3.8	-4.4	-4.8	-4.9	1.1	0.5	1.6			
8200.00	-4.0	-4.6	-4.6	-4.8	1.1	0.5	2.0			
8300.00	-4.2	-4.7	-4.2	-4.4	1.1	0.5	1.8			
8400.00	-4.4	-5.0	-4.1	-4.3	1.1	0.5	1.5			
8500.00	-4.6	-5.1	-3.8	-4.0	1.1	0.5	1.8			

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
5500.0	70.8	70.8	70.6	70.4	70.0	69.3	66.9	41.4	41.7	42.4	41.7	41.9	41.7	39.2
6000.0	77.9	77.7	77.6	77.4	77.1	76.7	76.2	40.4	40.8	41.3	42.6	42.5	42.1	35.5
7000.0	90.5	90.4	90.4	90.2	90.0	89.7	89.1	39.9	40.0	40.4	42.5	42.7	41.8	36.0
8000.0	84.8	84.7	84.7	84.7	84.6	84.4	84.5	40.7	42.0	42.6	40.5	40.5	40.3	39.4
8500.0	91.1	91.2	91.1	90.8	90.7	92.3	91.0	41.5	42.5	43.7	45.6	47.8	37.4	23.5

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +5.75 V, V_{EN} = +5.75 V, I_{DD} = 104 mA, I_{EN} = 2.55 mA @ Temperature = -45°C

FREQ (GHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure										
200.00	15.9	-33.9	-1.8	-4.0	1.4	0.9	20.9	22.7	3.7	34.5	33.2	35.2	36.3	36.0	35.0	34.5
300.00	20.8	-28.9	-5.9	-8.1	1.2	0.8	20.9	22.7	1.8	33.7	36.2	34.4	35.8	35.7	34.8	34.8
400.00	22.3	-27.6	-12.6	-13.3	1.1	0.7	21.4	23.1	1.4	32.9	36.7	36.9	37.2	37.8	36.8	36.3
500.00	22.6	-27.2	-17.4	-14.1	1.1	0.6	21.8	23.3	1.2	32.6	34.7	39.3	39.8	37.9	37.4	36.9
600.00	22.6	-27.2	-16.1	-13.0	1.1	0.6	22.1	23.5	1.1	34.8	36.7	38.3	39.5	38.9	37.8	37.7
700.00	22.6	-27.3	-14.4	-12.3	1.1	0.6	22.3	23.7	1.0	35.9	36.2	37.0	37.7	37.4	37.0	36.4
800.00	22.6	-27.3	-13.6	-12.0	1.1	0.6	22.4	23.8	1.0	36.7	37.8	37.6	38.8	37.7	37.6	37.3
900.00	22.5	-27.4	-13.2	-11.9	1.1	0.6	22.5	23.9	1.1	36.4	39.3	36.5	37.5	37.8	37.1	37.0
1000.00	22.6	-27.4	-13.0	-12.0	1.1	0.6	22.6	24.0	1.1	37.1	35.6	36.1	37.2	37.3	37.1	36.9
1100.00	22.6	-27.4	-13.1	-12.2	1.1	0.6	22.6	23.9	1.1	34.4	35.0	37.4	37.4	37.1	36.8	36.8
1200.00	22.6	-27.4	-13.2	-12.6	1.1	0.6	22.7	24.0	1.1	38.9	38.4	36.5	36.1	36.7	36.2	36.2
1300.00	22.6	-27.4	-13.5	-13.1	1.1	0.6	22.6	24.0	1.1	35.8	35.3	36.3	36.5	36.1	35.9	35.9
1400.00	22.6	-27.4	-13.9	-13.7	1.1	0.6	22.6	24.0	1.0	35.7	34.0	35.1	35.4	35.9	36.2	36.0
1500.00	22.7	-27.4	-14.4	-14.5	1.1	0.6	22.4	24.1	1.0	32.9	34.6	36.3	35.5	35.6	35.2	35.1
1600.00	22.7	-27.5	-14.9	-15.4	1.1	0.7	22.6	24.1	1.0	34.6	34.3	35.3	35.0	35.2	35.2	35.0
1700.00	22.7	-27.5	-15.1	-16.1	1.1	0.7	22.6	24.2	1.1	36.8	35.5	35.3	35.3	35.4	35.2	35.2
1800.00	22.7	-27.6	-15.8	-17.4	1.1	0.7	22.4	24.1	1.1	36.3	32.7	35.2	34.7	34.9	35.0	34.9
1900.00	22.8	-27.6	-16.3	-19.1	1.1	0.7	22.4	24.1	1.1	34.7	33.7	33.8	34.0	34.5	34.5	34.3
2000.00	22.8	-27.6	-16.7	-21.0	1.1	0.7	22.2	24.0	1.1	32.3	33.3	34.3	33.9	34.8	34.7	34.6
2100.00	22.8	-27.6	-16.8	-23.2	1.1	0.7	22.5	24.2	1.1	31.5	35.3	33.7	33.8	34.3	34.5	34.5
2200.00	22.8	-27.6	-16.8	-25.8	1.1	0.7	22.4	24.2	1.2	32.8	34.8	32.9	33.3	34.1	34.5	34.5
2300.00	22.8	-27.7	-16.6	-29.0	1.2	0.7	22.4	24.3	1.2	34.5	33.3	33.8	33.9	34.2	34.4	34.4
2400.00	22.8	-27.7	-16.2	-31.1	1.2	0.7	22.2	24.5	1.2	33.4	34.1	32.5	32.5	32.6	32.6	32.5
2500.00	22.8	-27.9	-16.1	-31.2	1.2	0.7	22.1	24.5	1.2	32.2	31.3	32.7	32.7	32.6	32.6	32.5
2600.00	22.8	-27.9	-15.7	-28.6	1.2	0.7	22.0	24.6	1.2	34.3	32.7	32.1	32.9	32.5	32.6	32.5
2700.00	22.8	-28.0	-15.3	-26.0	1.2	0.7	21.5	24.2	1.3	31.0	31.5	32.7	32.4	32.5	32.7	32.6
2800.00	22.8	-28.1	-14.9	-23.8	1.2	0.7	21.4	23.9	1.3	33.4	31.3	31.8	32.2	32.0	32.1	31.9
2900.00	22.8	-28.2	-14.3	-21.9	1.2	0.8	21.1	23.6	1.3	32.0	32.6	32.4	32.5	32.4	32.3	32.3
3000.00	22.8	-28.3	-13.8	-20.5	1.2	0.8	21.3	23.9	1.3	30.0	30.8	31.2	31.0	31.2	31.1	30.8
3100.00	22.8	-28.3	-13.2	-19.6	1.2	0.8	21.3	24.1	1.3	31.7	30.7	30.9	31.1	30.9	30.7	30.7
3200.00	22.7	-28.3	-12.9	-19.0	1.2	0.8	21.3	24.2	1.3	30.8	31.5	31.8	31.5	31.5	31.4	31.3
3300.00	22.7	-28.3	-12.6	-18.6	1.2	0.8	21.3	24.1	1.3	30.4	30.6	30.6	30.9	31.0	30.9	30.9
3400.00	22.7	-28.4	-12.4	-18.1	1.2	0.8	21.1	23.9	1.3	30.5	30.9	30.8	31.3	31.2	31.2	31.2
3500.00	22.7	-28.4	-12.3	-18.0	1.2	0.8	21.2	23.9	1.3	28.9	31.0	30.6	30.7	30.8	30.8	30.7
3600.00	22.8	-28.3	-12.3	-18.2	1.2	0.8	21.1	23.8	1.3	30.4	30.4	30.8	30.6	30.8	30.9	30.9
3700.00	22.8	-28.4	-12.3	-18.4	1.2	0.8	21.1	24.2	1.3	31.1	30.6	31.0	31.5	31.7	31.7	31.9
3800.00	22.8	-28.4	-12.4	-18.6	1.2	0.8	21.3	24.3	1.2	30.0	30.7	30.6	31.2	31.5	31.5	31.5
3900.00	22.8	-28.5	-12.4	-18.9	1.2	0.8	21.7	24.3	1.2	30.1	30.8	30.9	30.8	31.0	31.2	31.2
4000.00	22.9	-28.5	-12.5	-19.4	1.2	0.8	21.9	24.5	1.2	29.6	31.4	31.1	30.9	31.2	31.3	31.5
4100.00	22.9	-28.5	-12.8	-20.1	1.2	0.8	22.2	24.6	1.2	29.4	29.8	30.0	30.5	30.6	30.9	31.0
4200.00	22.9	-28.4	-12.9	-21.0	1.2	0.8	22.2	24.5	1.2	30.4	30.1	30.1	30.4	31.0	31.3	31.3
4300.00	22.9	-28.6	-13.2	-21.5	1.2	0.8	22.2	24.6	1.2	30.4	30.2	30.4	31.1	31.2	31.4	31.4
4400.00	23.0	-28.7	-13.8	-23.0	1.2	0.8	22.2	24.7	1.2	32.0	31.1	30.5	30.7	30.9	31.1	31.3
4500.00	23.0	-28.6	-14.0	-24.2	1.2	0.8	22.2	25.0	1.2	29.7	30.2	30.6	30.8	30.6	30.9	31.0
4600.00	23.0	-28.7	-14.7	-25.2	1.2	0.8	22.0	25.0	1.2	30.6	30.5	30.1	30.1	30.6	30.7	30.8
4700.00	23.1	-28.7	-15.2	-28.0	1.2	0.8	22.0	24.9	1.2	29.2	29.2	30.1	30.2	30.5	30.6	30.8
4800.00	23.2	-28.8	-15.7	-29.3	1.2	0.8	22.1	24.6	1.2	29.9	29.6	30.3	30.3	30.6	31.0	31.2
4900.00	23.1	-28.9	-16.7	-29.6	1.2	0.8	21.8	24.6	1.2	29.1	28.8	29.3	29.6	29.9	30.1	30.1
5000.00	23.2	-28.9	-17.1	-32.5	1.2	0.8	21.8	24.5	1.3	28.8	28.9	28.7	29.1	29.2	29.4	29.5
5100.00	23.3	-29.0	-18.2	-33.3	1.2	0.8	22.0	24.3	1.2	28.2	28.3	28.4	28.7	29.0	29.3	29.6
5200.00	23.2	-29.0	-19.6	-31.6	1.3	0.8	22.0	24.2	1.2	28.1	28.1	29.0	29.2	29.6	30.1	30.1
5300.00	23.4	-29.0	-20.0	-33.5	1.2	0.8	22.1	24.6	1.2	29.3	28.5	29.1	29.2	29.7	30.4	30.4
5400.00	23.3	-29.2	-22.4	-31.9	1.3	0.8	22.2	24.8	1.2	28.1	28.3	28.7	28.9	29.2	29.5	29.8
5500.00	23.4	-29.2	-23.3	-30.8	1.3	0.8	22.0	24.7	1.2	28.0	28.3	28.4	28.6	29.0	29.3	29.5
5600.00	23.5	-29.2	-23.2	-35.1	1.3	0.8	21.5	24.5	1.2	28.9	28.2	28.7	28.6	28.9	29.1	29.3
5700.00	23.4	-29.4	-26.5	-31.2	1.3	0.8	21.3	24.4	1.2	27.5	28.3	28.4	28.6	28.8	29.1	29.2
5800.00	23.5	-29.2	-24.7	-35.7	1.3	0.8	21.2	24.2	1.2	27.5	28.1	28.0	28.0	28.3	28.6	28.7
5900.00	23.5	-29.5	-22.0	-32.7	1.3	0.8	21.0	24.2	1.3	26.9	27.4	27.5	27.8	28.0	28.3	28.4
6000.00	23.4	-29.5	-23.0	-30.7	1.3	0.8	20.1	23.9	1.4	26.4	26.5	26.8	26.9	27.0	27.1	27.2
6100.00	23.6	-29.4	-19.3	-30.5	1.3	0.8	20.1	23.6	1.2	26.1	26.4	26.3	26.4	26.6	26.9	27.2
6200.00	23.5	-29.8	-17.1	-24.2	1.3	0.8	19.8	22.8	1.3	25.5	25.8	25.9	25.9	26.2	26.4	26.8
6300.00	23.5	-29.6	-16.9	-24.6	1.3	0.8	19.7	22.3	1.3	25.5	25.7	25.7	25.9	26.3	26.7	27.2
6400.00	23.6	-29.8	-14.4	-20.9												

TEST CONDITIONS: $V_{DD} = +5.75$ V, $V_{EN} = +5.75$ V, $I_{DD} = 104$ mA, $I_{EN} = 2.55$ mA @ Temperature = - 45°C

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	45.4	45.3	45.3	45.1	45.0	44.8	44.4
1000.0	43.1	43.1	43.0	42.9	42.8	42.7	42.6
2000.0	40.2	40.0	40.0	39.9	39.9	40.0	40.0
4000.0	40.0	39.9	39.9	39.9	39.9	40.1	40.4
6000.0	30.8	30.7	30.6	30.5	30.5	30.5	30.7
8000.0	36.3	36.2	36.2	36.3	36.8	37.6	39.4

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +5.75 V, V_{EN} = +5.75 V, I_{DD} = 111 mA, I_{EN} = 2.53 mA @ Temperature = -45°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure (dBm)										
5500.00	22.8	-29.9	-11.7	-10.8	1.3	0.7	21.6	24.4	1.2	28.1	29.2	29.3	29.6	29.9	30.1	
5600.00	22.9	-29.9	-11.5	-11.0	1.3	0.7	21.3	24.3	1.1	27.6	28.5	28.1	28.2	28.6	28.8	
5700.00	22.9	-29.9	-12.0	-11.3	1.3	0.8	21.1	24.2	1.1	27.9	28.3	28.2	28.4	28.7	28.9	
5800.00	23.0	-30.0	-11.7	-11.4	1.3	0.8	21.0	24.1	1.1	27.2	28.6	28.0	28.3	28.5	28.8	
5900.00	23.0	-29.9	-12.2	-11.7	1.3	0.8	20.4	23.9	1.1	27.5	27.5	27.5	27.7	27.9	28.1	
6000.00	23.1	-30.1	-11.8	-11.7	1.3	0.8	19.4	23.2	1.1	25.7	25.8	25.9	26.1	26.3	26.4	
6100.00	23.1	-29.9	-12.3	-12.2	1.3	0.8	20.0	23.4	1.1	26.3	26.4	26.5	26.5	26.8	27.1	
6200.00	23.3	-30.0	-12.0	-12.1	1.3	0.8	20.1	23.1	1.1	25.8	25.4	25.6	25.8	26.0	26.3	
6300.00	23.3	-30.0	-12.4	-12.5	1.3	0.8	20.6	23.3	1.1	26.4	25.9	26.1	26.4	26.7	27.1	
6400.00	23.4	-30.2	-12.1	-12.3	1.3	0.8	20.6	23.2	1.1	26.0	25.8	26.1	26.3	26.6	27.1	
6500.00	23.4	-30.1	-12.6	-12.9	1.3	0.8	20.5	22.9	1.2	25.9	26.3	26.2	26.4	26.7	27.2	
6600.00	23.5	-30.4	-12.5	-12.7	1.3	0.8	20.7	23.0	1.2	26.0	26.4	26.3	26.5	26.9	27.4	
6700.00	23.5	-30.4	-13.2	-13.4	1.3	0.8	20.6	22.8	1.2	26.0	26.2	26.3	26.4	26.9	27.4	
6800.00	23.6	-30.6	-13.1	-13.2	1.3	0.8	20.8	22.7	1.2	26.9	26.3	26.5	26.7	27.1	27.7	
6900.00	23.6	-30.6	-13.8	-13.9	1.3	0.8	20.9	22.8	1.2	26.5	26.0	26.7	26.9	27.3	28.7	
7000.00	23.7	-30.8	-13.8	-13.8	1.4	0.8	21.0	22.8	1.2	25.7	25.6	26.2	26.5	26.9	27.5	
7100.00	23.7	-30.8	-14.8	-14.7	1.4	0.8	21.0	22.7	1.3	26.3	26.1	26.5	26.8	27.2	27.7	
7200.00	23.8	-31.2	-14.9	-14.6	1.4	0.8	21.1	22.8	1.3	26.0	26.2	26.3	26.6	27.0	28.5	
7300.00	23.7	-31.2	-16.4	-15.7	1.4	0.8	21.1	22.8	1.3	25.7	25.7	25.9	26.1	26.6	27.3	
7400.00	23.8	-31.6	-16.6	-15.7	1.5	0.8	21.4	22.9	1.4	25.6	25.9	25.8	26.1	26.7	28.2	
7500.00	23.7	-31.6	-18.6	-17.2	1.5	0.8	20.9	22.5	1.5	25.3	25.8	25.7	26.1	26.6	27.3	
7600.00	23.8	-32.1	-18.3	-17.1	1.5	0.9	21.0	22.4	1.5	25.6	24.9	25.6	26.0	26.5	27.1	
7700.00	23.7	-32.3	-20.5	-19.2	1.6	0.9	21.2	22.5	1.6	24.0	23.9	24.7	25.0	25.5	26.3	
7800.00	23.7	-33.0	-18.2	-19.3	1.7	0.9	20.8	22.1	1.6	24.8	24.9	25.3	25.6	26.2	26.9	
7900.00	23.5	-33.2	-19.1	-23.4	1.8	0.9	20.5	21.9	1.7	24.8	24.4	25.1	25.5	26.0	26.7	
8000.00	23.4	-34.3	-15.4	-22.9	2.0	0.9	20.0	21.5	1.9	23.9	24.2	24.4	24.8	25.5	26.4	
8100.00	23.1	-34.4	-15.2	-28.3	2.0	1.0	20.1	21.3	1.9	23.8	24.1	24.1	24.6	25.2	26.1	
8200.00	22.7	-36.2	-11.5	-20.2	2.4	1.0	19.8	21.0	2.1	22.5	23.2	23.2	23.8	24.5	25.6	
8300.00	22.4	-35.9	-11.4	-19.5	2.4	1.0	19.8	20.9	2.2	23.0	22.8	23.4	24.0	24.7	25.7	
8400.00	21.5	-38.8	-8.4	-13.7	3.2	1.1	19.6	20.5	2.4	23.0	23.2	23.4	23.9	24.6	25.8	
8500.00	21.3	-38.4	-8.0	-12.8	3.1	1.1	19.1	20.0	2.5	21.6	21.6	22.1	22.6	23.5	24.8	

FREQ (MHz)	IP-2 Output Pout = -2	IP-2 Output Pout = +0	IP-2 Output Pout = +2	IP-2 Output Pout = +4	IP-2 Output Pout = +6	IP-2 Output Pout = +8	IP-2 Output Pout = +10
	(dBm)						
5500.0	38.5	38.4	38.3	38.2	38.2	38.1	38.2
6000.0	33.1	33.0	32.9	32.8	32.7	32.6	32.6
7000.0	41.7	41.6	41.4	41.2	41.1	41.0	41.2
8000.0	50.4	50.3	50.1	50.0	49.8	49.8	49.9
8500.0	59.8	59.6	59.4	59.2	59.2	59.3	59.8



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +5.75$ V, $V_{EN} = 0$ V, $I_{DD} = 4$ mA, $I_{EN} = 0$ mA @ Temperature = -45°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	K	Stability Measure	Noise Figure (dB)
200.00	-3.6	-3.7	-3.9	-8.5	1.1	0.8	2.6
300.00	-2.3	-2.3	-6.6	-11.3	1.0	0.6	1.6
400.00	-1.7	-1.7	-9.2	-13.5	1.0	0.5	1.1
500.00	-1.4	-1.4	-11.8	-15.3	1.0	0.5	1.0
600.00	-1.2	-1.2	-14.7	-16.9	1.0	0.4	0.8
700.00	-1.2	-1.2	-18.0	-18.2	1.0	0.4	0.9
800.00	-1.1	-1.2	-22.0	-18.5	1.0	0.4	0.9
900.00	-1.1	-1.1	-27.4	-18.3	1.0	0.4	0.9
1000.00	-1.1	-1.1	-33.6	-17.9	1.0	0.4	0.8
1100.00	-1.1	-1.1	-28.2	-17.5	1.0	0.4	0.8
1200.00	-1.1	-1.1	-23.8	-17.1	1.0	0.4	0.7
1300.00	-1.1	-1.2	-21.0	-16.6	1.0	0.4	0.6
1400.00	-1.1	-1.2	-19.0	-16.1	1.0	0.4	0.7
1500.00	-1.2	-1.2	-17.5	-15.6	1.0	0.4	0.8
1600.00	-1.2	-1.3	-16.4	-15.5	1.0	0.4	1.1
1700.00	-1.2	-1.3	-15.6	-15.5	1.0	0.4	0.9
1800.00	-1.3	-1.4	-14.9	-15.4	1.0	0.5	1.1
1900.00	-1.3	-1.4	-14.4	-15.2	1.0	0.5	0.9
2000.00	-1.3	-1.4	-14.0	-15.2	1.0	0.5	1.4
2100.00	-1.3	-1.5	-13.9	-15.4	1.0	0.5	0.8
2200.00	-1.4	-1.5	-13.6	-15.7	1.0	0.5	0.8
2300.00	-1.4	-1.5	-13.5	-15.9	1.0	0.5	0.9
2400.00	-1.4	-1.6	-13.5	-16.4	1.0	0.5	1.2
2500.00	-1.4	-1.6	-13.5	-16.9	1.0	0.5	1.3
2600.00	-1.4	-1.7	-13.6	-17.6	1.0	0.6	1.4
2700.00	-1.5	-1.7	-13.7	-18.5	1.0	0.6	1.5
2800.00	-1.5	-1.8	-14.0	-19.5	1.1	0.6	1.4
2900.00	-1.5	-1.9	-14.2	-20.5	1.1	0.6	1.1
3000.00	-1.5	-1.9	-14.3	-21.7	1.1	0.6	1.7
3100.00	-1.5	-1.9	-14.3	-23.5	1.1	0.6	1.6
3200.00	-1.5	-1.9	-14.4	-25.8	1.1	0.6	1.3
3300.00	-1.5	-1.8	-14.3	-28.0	1.1	0.6	1.7
3400.00	-1.5	-1.8	-14.4	-30.2	1.1	0.6	1.2
3500.00	-1.6	-1.8	-14.4	-30.9	1.1	0.6	1.3
3600.00	-1.6	-1.8	-14.3	-27.7	1.1	0.6	1.3
3700.00	-1.6	-1.8	-14.2	-25.0	1.1	0.6	1.1
3800.00	-1.6	-1.8	-14.0	-23.0	1.1	0.6	1.5
3900.00	-1.6	-1.8	-13.8	-21.2	1.1	0.6	1.4
4000.00	-1.6	-1.9	-13.6	-19.4	1.1	0.6	1.3
4100.00	-1.6	-1.9	-13.3	-18.0	1.1	0.6	1.0
4200.00	-1.7	-1.9	-13.0	-16.9	1.1	0.6	1.4
4300.00	-1.7	-1.9	-12.7	-16.0	1.1	0.6	1.3
4400.00	-1.7	-2.0	-12.4	-15.1	1.1	0.6	1.4
4500.00	-1.7	-2.0	-12.1	-14.5	1.1	0.6	1.4
4600.00	-1.7	-2.0	-11.9	-13.9	1.1	0.6	1.1
4700.00	-1.8	-2.0	-11.7	-13.4	1.1	0.6	1.1
4800.00	-1.8	-2.1	-11.5	-13.0	1.1	0.6	1.6
4900.00	-1.8	-2.1	-11.4	-12.7	1.1	0.6	1.9
5000.00	-1.8	-2.1	-11.2	-12.4	1.1	0.6	1.5
5100.00	-1.8	-2.2	-11.1	-12.1	1.1	0.6	1.1
5200.00	-1.8	-2.2	-11.0	-11.9	1.1	0.6	1.3
5300.00	-1.8	-2.2	-11.0	-11.9	1.1	0.6	1.7
5400.00	-1.8	-2.3	-11.0	-11.7	1.1	0.6	1.2
5500.00	-1.8	-2.2	-10.9	-11.4	1.1	0.6	1.1
5600.00	-1.8	-2.2	-11.0	-11.4	1.1	0.6	1.5
5700.00	-1.8	-2.2	-11.1	-11.4	1.1	0.6	1.7
5800.00	-1.7	-2.2	-11.2	-11.3	1.1	0.5	1.6
5900.00	-1.7	-2.2	-11.4	-11.5	1.1	0.6	1.4
6000.00	-1.7	-2.2	-11.4	-11.3	1.1	0.5	1.8
6100.00	-1.6	-2.1	-11.7	-11.5	1.1	0.5	1.1
6200.00	-1.7	-2.2	-12.0	-11.7	1.1	0.5	1.0
6300.00	-1.6	-2.1	-12.1	-11.6	1.1	0.5	1.4
6400.00	-1.6	-2.1	-12.4	-11.8	1.1	0.5	0.9
6500.00	-1.7	-2.2	-12.6	-11.8	1.1	0.5	1.4
6600.00	-1.6	-2.1	-12.6	-11.8	1.1	0.5	1.3
6700.00	-1.6	-2.1	-13.0	-12.1	1.1	0.5	1.7
6800.00	-1.6	-2.1	-13.1	-12.1	1.1	0.5	1.2
6900.00	-1.6	-2.1	-13.1	-12.1	1.1	0.5	1.2
7000.00	-1.6	-2.2	-13.2	-12.1	1.1	0.6	1.1
7100.00	-1.7	-2.2	-13.0	-11.9	1.1	0.6	1.6
7200.00	-1.7	-2.2	-12.9	-11.9	1.1	0.6	1.3
7300.00	-1.7	-2.3	-12.8	-11.7	1.1	0.6	1.7
7400.00	-1.8	-2.3	-12.4	-11.4	1.1	0.6	1.5
7500.00	-1.8	-2.4	-12.1	-11.2	1.1	0.6	1.4
7600.00	-2.0	-2.5	-11.8	-10.9	1.1	0.6	1.8
7700.00	-2.0	-2.5	-11.1	-10.5	1.1	0.6	1.2
7800.00	-2.1	-2.6	-10.8	-10.2	1.1	0.6	2.1
7900.00	-2.3	-2.8	-10.3	-9.6	1.1	0.6	2.1
8000.00	-2.3	-2.8	-9.6	-9.1	1.1	0.6	1.6



TEST CONDITIONS: $V_{DD} = +5.75$ V, $V_{EN} = 0$ V, $I_{DD} = 4$ mA, $I_{EN} = 0$ mA @ Temperature = -45°C

FREQ (MHz)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
400.0	42.6	43.2	43.2	43.2	39.1	31.1	22.6
1000.0	42.2	44.0	45.1	40.5	30.6	21.3	16.4
2000.0	42.6	44.0	45.2	44.7	39.1	29.1	19.7
4000.0	40.8	41.8	42.4	43.2	43.5	41.0	32.3
6000.0	40.7	42.1	43.3	44.1	44.4	40.5	29.8
8000.0	43.7	44.2	44.8	45.4	45.4	41.4	30.8

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	69.6	69.4	69.2	69.0	68.6	66.8	57.2
1000.0	70.4	70.6	70.8	71.1	70.6	61.2	52.2
2000.0	69.8	69.8	69.8	69.9	70.0	68.3	57.3
4000.0	71.4	71.4	71.4	71.4	71.5	71.6	71.3
6000.0	74.5	74.5	74.2	74.0	73.7	73.1	71.0
8000.0	84.4	84.4	84.4	84.4	84.3	84.1	82.8

FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
400.0	16.1	13.3
1000.0	13.7	11.5
2000.0	15.2	12.9
4000.0	17.8	15.3
6000.0	18.4	15.6
8000.0	18.3	14.9



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Typical Performance Data

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Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +5.75$ V, $V_{EN} = 0$ V, $I_{DD} = 4$ mA, $I_{EN} = 0$ mA @ Temperature = -45°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)	FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
					K	Measure				
5500.00	-1.5	-2.0	-21.1	-18.5	1.1	0.6	1.5	5500.0	17.4	14.7
5600.00	-1.5	-2.0	-21.9	-18.8	1.1	0.6	1.5	6000.0	18.9	15.5
5700.00	-1.5	-2.0	-21.6	-18.7	1.1	0.6	1.7	7000.0	20.5	16.8
5800.00	-1.5	-2.0	-20.9	-18.1	1.1	0.6	1.4	8000.0	21.0	15.2
5900.00	-1.5	-2.0	-19.7	-17.4	1.1	0.6	1.1	8500.0	19.4	14.0
6000.00	-1.5	-2.1	-18.8	-16.6	1.1	0.6	1.0			
6100.00	-1.5	-2.1	-17.4	-15.6	1.1	0.6	1.4			
6200.00	-1.5	-2.1	-16.5	-14.8	1.1	0.6	1.4			
6300.00	-1.6	-2.1	-15.3	-13.9	1.1	0.6	1.3			
6400.00	-1.6	-2.2	-14.4	-13.2	1.1	0.6	1.4			
6500.00	-1.6	-2.2	-13.5	-12.4	1.1	0.6	1.1			
6600.00	-1.7	-2.3	-12.7	-11.8	1.1	0.6	1.1			
6700.00	-1.8	-2.4	-11.8	-11.1	1.1	0.6	1.4			
6800.00	-1.8	-2.5	-11.1	-10.6	1.1	0.6	1.5			
6900.00	-1.9	-2.6	-10.4	-9.9	1.1	0.6	1.0			
7000.00	-2.0	-2.7	-9.8	-9.4	1.1	0.6	1.7			
7100.00	-2.2	-2.8	-9.1	-8.8	1.1	0.6	1.4			
7200.00	-2.3	-2.9	-8.6	-8.3	1.1	0.6	1.5			
7300.00	-2.4	-3.0	-8.0	-7.8	1.1	0.6	1.5			
7400.00	-2.6	-3.2	-7.5	-7.4	1.1	0.6	1.7			
7500.00	-2.7	-3.3	-7.0	-6.9	1.1	0.6	1.7			
7600.00	-2.9	-3.5	-6.6	-6.6	1.1	0.6	1.6			
7700.00	-3.1	-3.7	-6.1	-6.1	1.1	0.6	1.1			
7800.00	-3.3	-3.8	-5.8	-5.9	1.1	0.6	1.9			
7900.00	-3.5	-4.0	-5.4	-5.5	1.1	0.6	1.8			
8000.00	-3.7	-4.2	-5.2	-5.3	1.1	0.6	2.1			
8100.00	-3.8	-4.4	-4.8	-4.9	1.1	0.5	1.7			
8200.00	-4.1	-4.6	-4.6	-4.8	1.1	0.5	2.0			
8300.00	-4.2	-4.8	-4.2	-4.4	1.1	0.5	1.5			
8400.00	-4.5	-5.0	-4.1	-4.3	1.1	0.5	1.4			
8500.00	-4.6	-5.1	-3.8	-4.0	1.1	0.5	2.1			

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
5500.0	71.0	71.0	70.8	70.5	70.2	69.4	66.9	40.0	41.2	41.7	41.0	41.3	41.2	37.8
6000.0	77.5	77.5	77.4	77.3	77.1	76.8	76.2	39.6	40.0	40.7	42.1	42.0	41.4	33.7
7000.0	90.5	90.4	90.3	90.2	89.9	89.6	89.0	38.4	39.0	39.8	42.0	42.1	41.3	34.3
8000.0	84.4	84.5	84.4	84.4	84.3	84.2	84.2	39.9	41.6	42.1	39.9	40.0	39.8	38.6
8500.0	91.0	91.0	90.8	90.7	90.5	92.1	89.3	40.7	41.7	43.1	44.5	46.6	35.1	21.6



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +6.0 V, V_{EN} = +6.0 V, I_{DD} = 111 mA, I_{EN} = 2.65 mA @ Temperature = - 45°C

FREQ (GHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure										
200.00	16.0	-34.1	-1.8	-4.0	1.4	0.9	21.2	23.2	3.7	35.2	37.6	35.7	36.8	36.6	36.1	35.5
300.00	20.9	-29.1	-5.9	-8.1	1.2	0.8	21.3	23.1	1.8	31.7	34.6	35.0	36.7	37.0	36.5	35.7
400.00	22.4	-27.5	-12.6	-13.1	1.1	0.7	21.8	23.5	1.4	34.7	38.4	36.3	37.9	38.5	38.0	37.2
500.00	22.6	-27.3	-17.2	-13.9	1.1	0.6	22.1	23.7	1.2	34.8	35.7	37.0	37.9	39.5	38.4	38.1
600.00	22.7	-27.3	-15.8	-12.8	1.1	0.6	22.5	23.9	1.1	34.9	34.8	39.4	38.8	39.0	38.0	38.6
700.00	22.6	-27.4	-14.1	-12.1	1.1	0.6	22.6	24.0	1.1	35.7	38.6	38.7	38.5	38.0	38.3	37.5
800.00	22.6	-27.4	-13.3	-11.8	1.1	0.6	22.8	24.1	1.1	33.5	35.2	38.4	39.2	39.0	38.6	38.3
900.00	22.6	-27.4	-12.9	-11.7	1.1	0.6	22.9	24.2	1.1	34.9	36.3	38.4	36.8	37.8	38.2	37.9
1000.00	22.6	-27.5	-12.8	-11.8	1.1	0.6	23.0	24.3	1.1	34.0	35.5	36.6	37.3	37.5	37.8	37.9
1100.00	22.6	-27.5	-12.8	-12.0	1.1	0.6	22.9	24.3	1.1	34.1	37.1	38.7	37.5	38.1	38.1	37.9
1200.00	22.7	-27.5	-13.0	-12.4	1.1	0.6	23.0	24.4	1.1	34.5	35.9	35.9	36.8	37.4	37.2	37.2
1300.00	22.7	-27.5	-13.3	-12.8	1.1	0.6	23.0	24.4	1.0	34.9	35.0	36.6	37.1	36.7	36.9	37.0
1400.00	22.7	-27.5	-13.7	-13.4	1.1	0.6	23.0	24.4	1.0	35.3	37.2	35.6	36.0	36.7	37.0	37.0
1500.00	22.7	-27.5	-14.2	-14.2	1.1	0.6	22.8	24.4	1.0	32.6	35.5	35.8	36.1	35.9	36.2	36.1
1600.00	22.7	-27.6	-14.7	-15.0	1.1	0.7	23.0	24.5	1.1	35.1	35.6	35.4	35.7	35.6	36.1	36.0
1700.00	22.8	-27.6	-15.0	-15.7	1.1	0.7	23.0	24.6	1.1	32.9	36.2	35.8	35.3	35.9	35.8	36.0
1800.00	22.8	-27.6	-15.6	-17.0	1.1	0.7	22.9	24.5	1.1	33.7	33.6	35.1	35.0	35.5	35.7	35.7
1900.00	22.9	-27.6	-16.2	-18.6	1.1	0.7	22.8	24.5	1.1	33.8	33.1	34.3	34.9	35.0	35.1	35.3
2000.00	22.9	-27.6	-16.7	-20.4	1.1	0.7	22.6	24.4	1.1	32.5	36.6	35.1	35.3	35.4	35.5	35.5
2100.00	22.9	-27.7	-16.8	-22.3	1.1	0.7	22.9	24.6	1.2	34.2	35.0	34.8	34.1	34.8	35.2	35.4
2200.00	22.9	-27.7	-16.9	-24.7	1.2	0.7	22.9	24.6	1.2	30.9	33.7	34.3	34.5	34.9	35.1	35.3
2300.00	22.9	-27.8	-16.8	-27.5	1.2	0.7	22.8	24.7	1.2	32.0	31.8	34.1	34.2	34.7	34.9	35.2
2400.00	22.9	-27.8	-16.5	-30.0	1.2	0.7	22.6	24.8	1.2	31.9	33.0	32.2	33.1	33.3	33.5	33.5
2500.00	22.9	-27.9	-16.4	-31.2	1.2	0.7	22.5	24.9	1.2	31.8	33.9	32.2	33.1	33.1	33.4	33.4
2600.00	22.9	-27.9	-16.1	-29.3	1.2	0.7	22.4	24.9	1.2	32.3	32.7	33.2	33.3	33.3	33.4	33.4
2700.00	22.9	-28.1	-15.7	-26.7	1.2	0.7	22.0	24.5	1.3	33.1	33.9	32.9	33.4	33.4	33.4	33.4
2800.00	22.9	-28.2	-15.2	-24.4	1.2	0.7	21.8	24.2	1.3	31.9	31.0	31.5	32.6	32.7	32.9	32.9
2900.00	22.9	-28.3	-14.6	-22.4	1.2	0.7	21.5	24.0	1.4	31.1	33.5	32.7	33.1	33.3	33.2	33.2
3000.00	22.9	-28.4	-14.0	-21.0	1.2	0.8	21.7	24.2	1.3	33.9	31.5	31.3	31.5	31.8	31.9	31.8
3100.00	22.9	-28.3	-13.5	-20.0	1.2	0.8	21.7	24.5	1.3	30.8	31.2	31.3	31.5	31.8	31.7	31.6
3200.00	22.8	-28.4	-13.1	-19.4	1.2	0.8	21.7	24.6	1.3	30.7	31.3	32.1	32.0	32.2	32.2	32.3
3300.00	22.9	-28.3	-12.8	-19.0	1.2	0.7	21.7	24.5	1.3	30.2	30.7	31.2	31.5	31.6	31.7	31.8
3400.00	22.9	-28.4	-12.6	-18.5	1.2	0.7	21.5	24.2	1.2	30.1	31.1	31.6	31.3	31.8	32.0	32.1
3500.00	22.9	-28.4	-12.5	-18.4	1.2	0.7	21.7	24.3	1.3	31.0	31.8	30.9	31.2	31.3	31.5	31.6
3600.00	22.9	-28.5	-12.5	-18.7	1.2	0.8	21.6	24.2	1.2	30.4	31.0	31.2	31.2	31.4	31.5	31.7
3700.00	22.9	-28.5	-12.4	-18.9	1.2	0.8	21.6	24.5	1.3	31.5	30.7	31.6	31.7	32.1	32.4	32.7
3800.00	22.9	-28.5	-12.6	-19.1	1.2	0.8	21.8	24.6	1.2	30.5	29.8	31.2	31.4	31.7	32.0	32.2
3900.00	22.9	-28.5	-12.6	-19.3	1.2	0.8	22.1	24.7	1.2	29.5	30.8	31.0	31.0	31.5	31.8	32.0
4000.00	23.0	-28.5	-12.7	-19.9	1.2	0.8	22.3	24.8	1.2	29.2	31.0	30.9	31.1	31.6	31.9	32.2
4100.00	23.0	-28.6	-13.0	-20.7	1.2	0.8	22.6	25.0	1.2	30.7	29.8	30.5	30.9	31.2	31.4	31.7
4200.00	23.0	-28.5	-13.1	-21.6	1.2	0.8	22.6	24.9	1.2	29.1	30.1	30.6	31.0	31.3	31.6	32.0
4300.00	23.1	-28.6	-13.4	-22.1	1.2	0.8	22.6	25.0	1.2	29.9	30.7	30.8	31.0	31.4	31.8	32.1
4400.00	23.1	-28.7	-13.9	-23.8	1.2	0.8	22.6	25.1	1.2	30.0	29.5	30.7	31.0	31.3	31.6	32.0
4500.00	23.1	-28.6	-14.2	-25.1	1.2	0.8	22.6	25.3	1.2	29.3	29.8	30.8	31.0	31.2	31.4	31.7
4600.00	23.1	-28.7	-14.9	-26.3	1.2	0.8	22.4	25.3	1.2	29.2	29.5	30.8	30.5	30.9	31.2	31.5
4700.00	23.2	-28.8	-15.4	-29.6	1.2	0.8	22.4	25.1	1.2	29.5	30.1	30.6	30.5	30.8	31.2	31.5
4800.00	23.3	-28.8	-15.9	-31.4	1.2	0.8	22.5	24.9	1.2	29.6	29.4	30.3	30.7	31.1	31.2	31.8
4900.00	23.2	-28.9	-17.0	-31.9	1.2	0.8	22.2	24.9	1.2	29.4	29.3	29.5	29.9	30.2	30.5	30.8
5000.00	23.3	-28.9	-17.3	-35.4	1.2	0.8	22.2	24.8	1.3	28.9	28.8	29.1	29.4	29.6	29.9	30.3
5100.00	23.4	-29.1	-18.5	-36.5	1.2	0.8	22.4	24.6	1.2	29.1	28.7	28.8	29.1	29.3	29.8	30.2
5200.00	23.3	-29.0	-19.9	-32.8	1.2	0.8	22.4	24.6	1.2	29.2	29.1	28.8	29.2	29.7	30.0	30.6
5300.00	23.5	-29.1	-20.3	-35.0	1.2	0.8	22.5	24.9	1.2	28.9	28.9	29.4	29.5	29.9	30.3	30.8
5400.00	23.4	-29.3	-22.9	-33.8	1.3	0.8	22.6	25.0	1.2	28.7	28.8	28.9	29.1	29.5	29.9	30.4
5500.00	23.5	-29.2	-23.7	-31.3	1.3	0.8	22.4	25.0	1.2	29.3	28.1	28.7	28.9	29.3	29.7	30.1
5600.00	23.6	-29.4	-23.7	-36.3	1.3	0.8	21.9	24.7	1.2	28.0	28.4	28.7	29.0	29.3	29.6	29.9
5700.00	23.4	-29.5	-27.1	-33.5	1.3	0.8	21.7	24.6	1.3	27.9	28.3	28.5	28.8	29.2	29.5	29.9
5800.00	23.6	-29.3	-25.1	-38.4	1.3	0.8	21.5	24.4	1.3	27.6	27.7	28.4	28.4	28.8	29.1	29.4
5900.00	23.6	-29.5	-22.2	-36.0	1.3	0.8	21.4	24.4	1.3	27.9	27.9	28.1	28.1	28.4	28.8	29.1
6000.00	23.5	-29.5	-23.1	-33.7	1.3	0.8	20.5	23.9	1.3	26.2	27.1	27.0	27.3	27.4	27.7	27.9
6100.00	23.7	-29.4	-19.4	-31.5	1.3	0.8	20.6	23.6	1.2	26.6	26.7	26.6	26.9	27.1	27.4	27.7
6200.00	23.6	-29.8	-17.1	-24.6	1.3	0.8	20.3	22.8	1.3	25.3	26.0	25.9	26.3	26.5	26.9	27.3
6300.00	23.6	-29.7	-16.8	-25.0	1.3	0.8	20.1	22.4	1.3	26.0	26.0	26.3	26.3	26.6	27.0	27.6
6400.00	23.7	-29.9	-14.3	-21.0	1.3	0.8	20.0	22.								

TEST CONDITIONS: $V_{DD} = +6.0$ V, $V_{EN} = +6.0$ V, $I_{DD} = 111$ mA, $I_{EN} = 2.65$ mA @ Temperature = -45°C

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	46.8	46.6	46.6	46.5	46.4	46.2	45.7
1000.0	44.4	44.4	44.2	44.1	44.1	43.9	43.8
2000.0	41.1	41.0	40.9	40.9	40.8	40.9	41.0
4000.0	40.5	40.4	40.4	40.3	40.3	40.5	40.8
6000.0	31.3	31.2	31.1	31.0	31.0	31.0	31.1
8000.0	37.0	36.9	36.7	36.8	37.2	38.0	39.7

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +6.0$ V, $V_{EN} = +6.0$ V, $I_{DD} = 119$ mA, $I_{EN} = 2.63$ mA @ Temperature = -45°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure (dBm)										
5500.00	22.9	-29.8	-11.7	-11.0	1.3	0.7	22.0	24.5	1.2	29.0	29.1	29.6	30.1	30.3	30.7	
5600.00	23.0	-29.9	-11.5	-11.1	1.3	0.7	21.7	24.4	1.1	27.8	28.1	28.5	28.9	29.3	29.5	
5700.00	22.9	-29.8	-12.0	-11.4	1.3	0.7	21.5	24.3	1.1	27.2	28.1	28.7	29.0	29.4	29.7	
5800.00	23.1	-29.9	-11.7	-11.5	1.3	0.7	21.5	24.3	1.1	27.3	28.2	28.4	28.5	28.9	29.2	29.5
5900.00	23.1	-29.8	-12.2	-11.9	1.3	0.7	20.8	24.0	1.1	28.3	27.7	27.9	28.1	28.4	28.7	28.9
6000.00	23.2	-30.0	-11.8	-11.8	1.3	0.8	19.9	23.3	1.1	26.2	26.0	26.3	26.5	26.8	27.0	27.1
6100.00	23.2	-29.9	-12.3	-12.3	1.3	0.8	20.4	23.4	1.1	26.1	27.1	26.6	27.0	27.2	27.5	27.7
6200.00	23.4	-30.0	-12.0	-12.2	1.3	0.8	20.4	23.1	1.1	25.6	26.0	25.9	26.1	26.4	26.8	27.1
6300.00	23.4	-30.0	-12.4	-12.6	1.3	0.8	20.9	23.4	1.2	26.2	26.2	26.6	26.8	27.1	27.5	28.0
6400.00	23.5	-30.1	-12.1	-12.3	1.3	0.8	21.0	23.3	1.1	26.3	26.6	26.3	26.5	26.9	27.4	28.0
6500.00	23.5	-30.1	-12.6	-12.9	1.3	0.8	20.9	23.1	1.2	26.2	26.4	26.2	26.6	27.0	27.5	28.2
6600.00	23.6	-30.4	-12.4	-12.7	1.3	0.8	21.1	23.2	1.2	26.1	26.6	26.9	27.2	27.7	28.4	
6700.00	23.6	-30.3	-13.1	-13.3	1.3	0.8	21.0	23.0	1.2	26.2	26.1	26.4	26.7	27.1	27.7	28.4
6800.00	23.7	-30.5	-13.0	-13.1	1.3	0.8	21.1	23.0	1.2	26.4	26.5	26.6	27.0	27.3	27.9	28.7
6900.00	23.7	-30.4	-13.7	-13.7	1.3	0.8	21.2	23.0	1.2	26.1	26.6	26.7	27.0	27.5	28.1	28.9
7000.00	23.8	-30.8	-13.7	-13.6	1.3	0.8	21.3	23.0	1.2	25.8	26.7	26.3	26.6	27.1	27.7	28.5
7100.00	23.8	-30.7	-14.7	-14.4	1.3	0.8	21.3	23.0	1.3	26.3	26.2	26.5	26.9	27.3	27.9	28.7
7200.00	23.9	-31.1	-14.8	-14.3	1.4	0.8	21.5	23.1	1.3	26.2	26.0	26.5	26.7	27.2	27.8	28.6
7300.00	23.8	-31.1	-16.3	-15.3	1.4	0.8	21.5	23.1	1.3	25.5	25.8	25.9	26.2	26.8	27.5	28.4
7400.00	23.9	-31.5	-16.3	-15.3	1.4	0.8	21.8	23.2	1.4	25.7	25.9	25.8	26.3	26.7	27.5	28.4
7500.00	23.8	-31.7	-18.3	-16.6	1.5	0.8	21.2	22.8	1.5	25.6	25.3	25.9	26.2	26.7	27.4	28.4
7600.00	23.9	-32.2	-17.8	-16.5	1.5	0.9	21.3	22.7	1.5	25.6	25.4	25.8	26.1	26.5	27.2	28.2
7700.00	23.8	-32.2	-19.8	-18.4	1.6	0.9	21.7	22.7	1.6	24.4	24.3	24.7	25.1	25.7	26.4	27.5
7800.00	23.8	-33.0	-17.4	-18.5	1.7	0.9	21.2	22.4	1.6	24.7	25.2	25.4	25.7	26.3	26.9	28.0
7900.00	23.6	-33.1	-18.2	-22.0	1.7	0.9	20.9	22.1	1.7	24.5	24.7	25.1	25.5	26.1	26.8	27.8
8000.00	23.5	-34.4	-14.7	-21.9	1.9	0.9	20.4	21.7	1.9	23.7	23.8	24.4	24.9	25.5	26.4	27.7
8100.00	23.2	-34.5	-14.5	-26.9	2.0	1.0	20.5	21.6	1.9	24.0	23.6	24.2	24.6	25.3	26.1	27.4
8200.00	22.7	-36.3	-11.0	-20.0	2.4	1.0	20.2	21.2	2.1	22.9	23.3	23.8	24.5	25.6	27.2	
8300.00	22.5	-35.9	-10.9	-19.7	2.4	1.0	20.3	21.1	2.2	23.1	23.2	23.5	24.0	24.7	25.7	27.2
8400.00	21.5	-39.0	-8.1	-13.7	3.3	1.1	20.0	20.7	2.4	23.2	22.7	23.5	24.0	24.7	25.8	27.3
8500.00	21.3	-38.6	-7.7	-12.8	3.1	1.1	19.5	20.2	2.5	21.5	21.7	22.1	22.7	23.6	24.9	26.8

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
5500.0	39.1	39.0	38.9	38.8	38.8	38.7	38.8
6000.0	33.6	33.6	33.5	33.4	33.2	33.2	33.2
7000.0	42.0	41.9	41.7	41.5	41.4	41.3	41.4
8000.0	50.8	50.7	50.4	50.3	50.1	50.1	50.2
8500.0	60.2	60.0	59.8	59.6	59.5	59.6	60.0



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions**Definitions:**

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +6.0$ V, $V_{EN} = 0$ V, $I_{DD} = 4$ mA, $I_{EN} = 0$ mA @ Temperature = -45°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	K	Stability Measure	Noise Figure (dB)
200.00	-3.7	-3.8	-3.9	-8.6	1.1	0.8	2.8
300.00	-2.3	-2.3	-6.6	-11.4	1.0	0.6	1.5
400.00	-1.7	-1.7	-9.2	-13.5	1.0	0.5	1.1
500.00	-1.4	-1.4	-11.8	-15.3	1.0	0.5	1.1
600.00	-1.2	-1.3	-14.7	-17.0	1.0	0.4	0.9
700.00	-1.2	-1.2	-18.0	-18.2	1.0	0.4	0.8
800.00	-1.1	-1.2	-22.0	-18.5	1.0	0.4	0.7
900.00	-1.1	-1.1	-27.4	-18.3	1.0	0.4	0.6
1000.00	-1.1	-1.1	-33.4	-17.9	1.0	0.4	0.6
1100.00	-1.1	-1.1	-28.2	-17.5	1.0	0.4	0.7
1200.00	-1.1	-1.1	-23.8	-17.1	1.0	0.4	0.8
1300.00	-1.1	-1.2	-21.0	-16.6	1.0	0.4	0.6
1400.00	-1.1	-1.2	-19.0	-16.0	1.0	0.4	0.9
1500.00	-1.2	-1.2	-17.5	-15.6	1.0	0.4	0.9
1600.00	-1.2	-1.3	-16.4	-15.4	1.0	0.4	0.9
1700.00	-1.2	-1.3	-15.6	-15.5	1.0	0.4	0.8
1800.00	-1.3	-1.4	-14.9	-15.4	1.0	0.5	1.1
1900.00	-1.3	-1.4	-14.4	-15.2	1.0	0.5	1.0
2000.00	-1.3	-1.5	-14.0	-15.2	1.0	0.5	1.2
2100.00	-1.4	-1.5	-13.8	-15.4	1.0	0.5	1.0
2200.00	-1.4	-1.5	-13.6	-15.7	1.0	0.5	0.9
2300.00	-1.4	-1.5	-13.5	-15.9	1.0	0.5	1.0
2400.00	-1.4	-1.6	-13.5	-16.4	1.0	0.5	1.3
2500.00	-1.4	-1.6	-13.4	-16.9	1.0	0.5	1.4
2600.00	-1.5	-1.7	-13.5	-17.6	1.0	0.6	1.5
2700.00	-1.5	-1.8	-13.7	-18.4	1.0	0.6	1.2
2800.00	-1.5	-1.8	-13.9	-19.5	1.1	0.6	0.9
2900.00	-1.5	-1.9	-14.2	-20.5	1.1	0.6	1.6
3000.00	-1.5	-1.9	-14.3	-21.7	1.1	0.6	1.8
3100.00	-1.5	-1.9	-14.3	-23.5	1.1	0.6	1.6
3200.00	-1.5	-1.9	-14.3	-25.7	1.1	0.6	1.2
3300.00	-1.5	-1.8	-14.3	-27.9	1.1	0.6	1.1
3400.00	-1.6	-1.8	-14.4	-30.2	1.1	0.6	1.6
3500.00	-1.6	-1.8	-14.4	-30.7	1.1	0.6	1.4
3600.00	-1.6	-1.8	-14.3	-27.6	1.1	0.6	1.6
3700.00	-1.6	-1.8	-14.2	-25.0	1.1	0.6	1.4
3800.00	-1.6	-1.8	-14.0	-22.9	1.1	0.6	1.4
3900.00	-1.6	-1.8	-13.8	-21.1	1.1	0.6	1.0
4000.00	-1.6	-1.9	-13.6	-19.4	1.1	0.6	1.8
4100.00	-1.6	-1.9	-13.3	-18.0	1.1	0.6	1.4
4200.00	-1.7	-1.9	-13.0	-16.9	1.1	0.6	1.5
4300.00	-1.7	-1.9	-12.7	-16.0	1.1	0.6	1.3
4400.00	-1.7	-2.0	-12.4	-15.1	1.1	0.6	1.5
4500.00	-1.7	-2.0	-12.1	-14.5	1.1	0.6	1.3
4600.00	-1.8	-2.0	-11.9	-13.9	1.1	0.6	1.1
4700.00	-1.8	-2.0	-11.7	-13.4	1.1	0.6	1.6
4800.00	-1.8	-2.1	-11.5	-13.0	1.1	0.6	1.4
4900.00	-1.8	-2.1	-11.4	-12.7	1.1	0.6	1.6
5000.00	-1.8	-2.1	-11.2	-12.3	1.1	0.6	1.6
5100.00	-1.8	-2.2	-11.1	-12.1	1.1	0.6	1.1
5200.00	-1.8	-2.2	-11.0	-11.9	1.1	0.6	1.7
5300.00	-1.8	-2.2	-11.0	-11.9	1.1	0.6	2.0
5400.00	-1.8	-2.3	-11.0	-11.7	1.1	0.6	2.1
5500.00	-1.8	-2.2	-10.9	-11.4	1.1	0.6	1.3
5600.00	-1.8	-2.2	-11.0	-11.4	1.1	0.6	1.7
5700.00	-1.8	-2.3	-11.1	-11.4	1.1	0.6	1.6
5800.00	-1.7	-2.2	-11.2	-11.3	1.1	0.5	1.6
5900.00	-1.7	-2.2	-11.4	-11.5	1.1	0.6	1.6
6000.00	-1.7	-2.2	-11.4	-11.3	1.1	0.5	1.9
6100.00	-1.7	-2.1	-11.7	-11.5	1.1	0.5	1.2
6200.00	-1.7	-2.2	-12.0	-11.7	1.1	0.5	1.3
6300.00	-1.6	-2.1	-12.1	-11.6	1.1	0.5	1.1
6400.00	-1.6	-2.1	-12.4	-11.8	1.1	0.5	1.4
6500.00	-1.7	-2.2	-12.6	-11.8	1.1	0.5	1.5
6600.00	-1.6	-2.1	-12.6	-11.8	1.1	0.5	1.7
6700.00	-1.6	-2.1	-13.0	-12.0	1.1	0.5	1.2
6800.00	-1.6	-2.1	-13.1	-12.1	1.1	0.5	1.0
6900.00	-1.6	-2.1	-13.1	-12.0	1.1	0.5	1.1
7000.00	-1.6	-2.2	-13.2	-12.0	1.1	0.6	1.6
7100.00	-1.7	-2.2	-13.0	-11.9	1.1	0.6	2.0
7200.00	-1.7	-2.2	-12.9	-11.9	1.1	0.6	1.8
7300.00	-1.7	-2.3	-12.8	-11.7	1.1	0.6	1.2
7400.00	-1.8	-2.3	-12.4	-11.4	1.1	0.6	1.7
7500.00	-1.9	-2.4	-12.1	-11.2	1.1	0.6	1.3
7600.00	-2.0	-2.5	-11.8	-10.9	1.1	0.6	1.2
7700.00	-2.0	-2.6	-11.1	-10.5	1.1	0.6	2.3
7800.00	-2.1	-2.6	-10.8	-10.2	1.1	0.6	1.8
7900.00	-2.3	-2.8	-10.3	-9.6	1.1	0.6	1.9
8000.00	-2.3	-2.8	-9.6	-9.1	1.1	0.6	1.9

TEST CONDITIONS: $V_{DD} = +6.0$ V, $V_{EN} = 0$ V, $I_{DD} = 4$ mA, $I_{EN} = 0$ mA @ Temperature = -45°C

FREQ (MHz)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
400.0	42.3	42.9	43.2	43.0	38.5	30.7	22.4
1000.0	42.6	43.8	44.9	39.7	30.3	21.0	16.3
2000.0	43.2	44.4	45.3	44.5	38.4	28.8	19.5
4000.0	40.1	40.8	42.0	42.9	43.0	40.2	31.7
6000.0	40.7	41.6	43.0	44.0	44.2	39.6	29.1
8000.0	41.6	42.5	43.5	44.5	44.6	40.4	30.1

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	69.3	69.2	69.0	68.8	68.4	66.4	56.5
1000.0	70.3	70.5	70.7	71.0	70.3	60.7	52.4
2000.0	69.7	69.6	69.7	69.8	69.8	68.0	56.9
4000.0	71.2	71.1	71.1	71.2	71.3	71.3	71.1
6000.0	74.2	74.2	74.1	74.0	73.7	73.1	70.6
8000.0	84.3	84.3	84.3	84.3	84.2	83.9	82.4

FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
400.0	16.1	13.2
1000.0	13.5	11.5
2000.0	15.2	12.8
4000.0	17.8	15.2
6000.0	18.4	15.5
8000.0	18.3	14.7



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +6.0 V, V_{EN} = 0 V, I_{DD} = 4 mA, I_{EN} = 0 mA @ Temperature = -45°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)	FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
					K	Measure				
5500.00	-1.6	-2.1	-20.9	-18.4	1.1	0.6	1.5	5500.0	17.7	14.6
5600.00	-1.5	-2.1	-21.6	-18.7	1.1	0.6	1.4	6000.0	18.5	15.5
5700.00	-1.5	-2.1	-21.4	-18.6	1.1	0.6	1.6	7000.0	20.3	16.7
5800.00	-1.5	-2.1	-20.8	-17.9	1.1	0.6	1.5	8000.0	20.7	15.1
5900.00	-1.5	-2.1	-19.6	-17.3	1.1	0.6	1.4	8500.0	19.3	13.8
6000.00	-1.5	-2.1	-18.7	-16.5	1.1	0.6	1.2			
6100.00	-1.5	-2.1	-17.4	-15.5	1.1	0.6	1.4			
6200.00	-1.5	-2.1	-16.4	-14.7	1.1	0.6	1.6			
6300.00	-1.6	-2.2	-15.3	-13.8	1.1	0.6	1.6			
6400.00	-1.6	-2.2	-14.4	-13.2	1.1	0.6	1.3			
6500.00	-1.7	-2.3	-13.5	-12.4	1.1	0.6	1.2			
6600.00	-1.7	-2.3	-12.7	-11.8	1.1	0.6	1.4			
6700.00	-1.8	-2.4	-11.8	-11.1	1.1	0.6	1.9			
6800.00	-1.9	-2.5	-11.1	-10.5	1.1	0.6	1.4			
6900.00	-2.0	-2.6	-10.4	-9.9	1.1	0.6	1.6			
7000.00	-2.1	-2.7	-9.8	-9.3	1.1	0.6	1.8			
7100.00	-2.2	-2.8	-9.1	-8.8	1.1	0.6	1.9			
7200.00	-2.3	-2.9	-8.6	-8.3	1.1	0.6	1.5			
7300.00	-2.5	-3.0	-8.0	-7.8	1.1	0.6	1.6			
7400.00	-2.6	-3.2	-7.5	-7.4	1.1	0.6	1.5			
7500.00	-2.8	-3.3	-7.0	-6.9	1.1	0.6	1.4			
7600.00	-2.9	-3.5	-6.6	-6.6	1.1	0.6	1.8			
7700.00	-3.1	-3.7	-6.1	-6.1	1.1	0.6	1.7			
7800.00	-3.3	-3.8	-5.8	-5.9	1.1	0.6	1.8			
7900.00	-3.5	-4.0	-5.4	-5.5	1.1	0.6	2.0			
8000.00	-3.7	-4.2	-5.2	-5.3	1.1	0.6	2.4			
8100.00	-3.9	-4.4	-4.8	-4.9	1.1	0.5	2.3			
8200.00	-4.1	-4.6	-4.6	-4.8	1.1	0.5	1.8			
8300.00	-4.3	-4.8	-4.2	-4.4	1.1	0.5	2.0			
8400.00	-4.5	-5.0	-4.1	-4.3	1.1	0.5	1.0			
8500.00	-4.6	-5.1	-3.8	-4.0	1.1	0.5	1.8			

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
5500.0	71.1	71.1	70.9	70.6	70.2	69.5	66.7	40.4	40.8	41.4	40.8	40.9	40.8	36.8
6000.0	77.3	77.5	77.4	77.4	77.1	76.8	76.1	39.3	40.4	40.6	42.2	42.0	41.1	32.8
7000.0	90.5	90.4	90.2	90.1	89.8	89.5	88.9	38.9	39.1	39.6	41.7	41.8	40.6	33.4
8000.0	84.4	84.4	84.4	84.2	84.3	84.1	84.0	41.6	42.3	42.4	39.8	39.8	39.6	38.3
8500.0	91.0	90.9	90.8	90.6	90.4	91.9	88.8	41.8	42.8	44.1	45.5	46.4	34.0	20.7



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IF/RF MICROWAVE COMPONENTS



REV. OR

TSY-83LN+

3/26/2024

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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +6.25 V, V_{EN} = +6.25 V, I_{DD} = 118 mA, I_{EN} = 2.76 mA @ Temperature = -45°C

FREQ (GHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure										
200.00	16.0	-34.1	-1.8	-3.9	1.4	0.9	21.7	23.6	3.7	31.6	35.2	36.6	37.2	36.8	36.8	36.3
300.00	21.0	-29.0	-5.9	-8.0	1.2	0.8	21.8	23.6	1.8	32.6	35.3	37.1	38.7	37.5	37.1	36.8
400.00	22.4	-27.7	-12.7	-13.0	1.1	0.7	22.2	24.0	1.4	37.7	35.3	38.0	38.0	38.6	39.4	38.5
500.00	22.7	-27.4	-16.9	-13.7	1.1	0.6	22.6	24.1	1.2	35.6	34.7	37.4	38.5	39.7	39.8	39.0
600.00	22.7	-27.3	-15.5	-12.6	1.1	0.6	22.9	24.2	1.1	32.1	37.7	38.5	39.7	39.3	39.7	39.4
700.00	22.7	-27.4	-13.8	-11.9	1.1	0.6	23.0	24.4	1.1	36.3	35.8	36.7	38.5	38.6	39.2	38.6
800.00	22.7	-27.5	-13.1	-11.6	1.1	0.6	23.1	24.5	1.0	33.6	35.9	37.5	39.5	39.5	39.1	39.3
900.00	22.7	-27.5	-12.7	-11.5	1.1	0.6	23.2	24.6	1.0	33.8	37.1	37.8	38.8	38.4	38.8	38.9
1000.00	22.7	-27.5	-12.5	-11.6	1.1	0.6	23.4	24.7	1.1	36.6	36.3	37.5	38.3	38.2	38.4	38.7
1100.00	22.7	-27.6	-12.6	-11.8	1.1	0.6	23.3	24.6	1.1	31.5	34.3	36.8	38.0	38.3	38.5	38.6
1200.00	22.7	-27.6	-12.8	-12.2	1.1	0.6	23.4	24.8	1.1	34.3	34.3	36.3	37.3	37.7	38.0	38.0
1300.00	22.7	-27.6	-13.0	-12.6	1.1	0.6	23.4	24.8	1.1	34.5	36.4	36.5	36.7	37.6	37.5	37.6
1400.00	22.8	-27.6	-13.5	-13.2	1.1	0.6	23.4	24.7	1.0	34.0	35.5	35.6	36.5	36.9	37.2	37.6
1500.00	22.8	-27.6	-14.0	-13.9	1.1	0.6	23.2	24.8	1.0	34.1	36.4	36.1	36.2	36.4	36.8	36.9
1600.00	22.8	-27.7	-14.5	-14.8	1.1	0.7	23.3	24.8	1.1	34.9	35.5	34.9	36.3	36.0	36.5	36.7
1700.00	22.8	-27.6	-14.8	-15.4	1.1	0.7	23.4	24.9	1.1	34.7	34.1	36.5	35.9	36.4	36.6	36.9
1800.00	22.9	-27.7	-15.5	-16.6	1.1	0.7	23.3	24.9	1.1	34.3	35.4	35.0	35.9	35.7	36.2	36.4
1900.00	22.9	-27.7	-16.2	-18.2	1.1	0.7	23.2	24.9	1.1	32.6	33.3	34.2	35.5	35.3	35.7	36.0
2000.00	23.0	-27.7	-16.7	-19.9	1.1	0.7	23.0	24.8	1.1	35.7	35.8	33.7	35.0	35.8	36.0	36.2
2100.00	23.0	-27.7	-16.9	-21.7	1.1	0.7	23.3	25.0	1.2	33.0	34.3	34.1	34.7	35.4	35.8	36.1
2200.00	23.0	-27.8	-17.0	-23.9	1.1	0.7	23.3	25.0	1.2	31.8	32.3	34.7	34.7	34.9	35.4	36.0
2300.00	23.0	-27.8	-17.0	-26.6	1.2	0.7	23.3	25.1	1.2	35.1	32.9	33.9	34.1	35.2	35.4	35.8
2400.00	23.0	-27.9	-16.7	-29.0	1.2	0.7	23.0	25.2	1.2	33.1	33.2	33.1	33.8	34.2	34.4	34.2
2500.00	23.0	-27.9	-16.6	-30.6	1.2	0.7	22.9	25.3	1.2	31.8	32.3	34.6	33.6	33.7	34.0	34.1
2600.00	23.0	-28.0	-16.4	-29.6	1.2	0.7	22.8	25.3	1.2	31.6	32.8	33.5	33.2	33.8	34.0	34.2
2700.00	23.0	-28.2	-16.0	-27.1	1.2	0.7	22.4	24.9	1.3	31.0	32.1	33.4	33.2	33.6	33.9	34.2
2800.00	23.0	-28.2	-15.5	-24.7	1.2	0.7	22.3	24.6	1.3	32.2	31.3	32.1	32.6	33.2	33.5	33.6
2900.00	23.0	-28.3	-14.9	-22.7	1.2	0.7	22.0	24.4	1.3	30.9	32.9	33.1	33.7	33.8	33.9	33.9
3000.00	23.0	-28.4	-14.3	-21.2	1.2	0.8	22.2	24.6	1.3	30.8	31.2	31.8	32.1	32.3	32.6	32.6
3100.00	23.0	-28.3	-13.7	-20.2	1.2	0.7	22.2	24.8	1.3	30.0	32.6	32.4	32.2	32.2	32.3	32.5
3200.00	22.9	-28.4	-13.3	-19.7	1.2	0.7	22.2	24.9	1.3	33.0	31.2	33.0	32.0	32.7	32.8	33.0
3300.00	22.9	-28.4	-13.0	-19.3	1.2	0.7	22.2	24.8	1.3	31.9	31.7	31.7	32.1	32.4	32.5	32.5
3400.00	22.9	-28.4	-12.8	-18.7	1.2	0.7	22.0	24.6	1.3	30.4	30.9	31.5	31.6	32.2	32.7	32.7
3500.00	22.9	-28.4	-12.7	-18.6	1.2	0.7	22.1	24.6	1.3	31.4	31.5	31.8	31.7	31.6	32.0	32.3
3600.00	23.0	-28.4	-12.7	-18.9	1.2	0.7	22.0	24.5	1.2	31.0	30.5	31.4	31.6	31.9	32.1	32.3
3700.00	23.0	-28.5	-12.6	-19.1	1.2	0.7	22.0	24.8	1.3	32.6	31.9	31.6	32.1	32.4	32.7	33.2
3800.00	23.0	-28.5	-12.7	-19.4	1.2	0.7	22.2	25.0	1.2	30.2	30.6	31.2	31.6	32.0	32.4	32.7
3900.00	23.0	-28.5	-12.7	-19.7	1.2	0.8	22.6	25.1	1.2	30.9	31.5	30.9	31.3	32.0	32.2	32.5
4000.00	23.1	-28.5	-12.8	-20.2	1.2	0.8	22.7	25.2	1.2	31.9	30.4	31.2	31.9	32.0	32.3	32.7
4100.00	23.1	-28.5	-13.1	-21.1	1.2	0.8	23.0	25.3	1.2	28.8	30.8	30.8	30.8	31.2	32.0	32.3
4200.00	23.1	-28.6	-13.2	-22.0	1.2	0.8	23.0	25.3	1.2	30.5	31.2	30.8	31.4	31.6	32.0	32.4
4300.00	23.1	-28.6	-13.6	-22.6	1.2	0.8	23.0	25.4	1.2	29.5	30.5	31.0	31.1	31.6	32.1	32.5
4400.00	23.2	-28.6	-14.1	-24.4	1.2	0.8	23.0	25.5	1.2	30.6	29.9	30.4	31.0	31.5	32.0	32.5
4500.00	23.2	-28.7	-14.3	-26.0	1.2	0.8	23.1	25.6	1.2	29.9	30.4	30.8	31.1	31.8	32.2	32.7
4600.00	23.2	-28.8	-15.0	-27.3	1.2	0.8	22.9	25.6	1.2	29.5	30.1	30.8	31.2	31.3	31.6	32.0
4700.00	23.3	-28.7	-15.6	-31.2	1.2	0.8	22.9	25.4	1.2	30.1	30.8	30.4	30.9	31.1	31.6	32.0
4800.00	23.3	-28.8	-16.0	-33.5	1.2	0.8	22.9	25.3	1.2	29.6	30.1	30.8	31.2	31.6	32.2	32.2
4900.00	23.3	-28.9	-17.1	-34.4	1.2	0.8	22.7	25.2	1.2	28.7	29.1	29.6	30.2	30.5	30.9	31.4
5000.00	23.4	-28.9	-17.5	-38.9	1.2	0.8	22.6	25.1	1.3	28.6	29.2	29.4	29.6	30.0	30.3	30.8
5100.00	23.5	-29.1	-18.7	-39.3	1.2	0.8	22.8	25.0	1.2	29.5	29.1	29.1	29.4	29.7	30.1	30.7
5200.00	23.4	-29.0	-20.1	-33.7	1.2	0.8	22.8	24.9	1.2	29.0	28.4	28.8	29.3	29.8	30.3	30.9
5300.00	23.6	-29.0	-20.5	-35.4	1.2	0.8	22.9	25.2	1.2	29.0	28.9	29.2	29.6	30.0	30.6	31.2
5400.00	23.5	-29.2	-23.2	-35.6	1.3	0.8	23.0	25.3	1.2	28.3	28.6	28.7	29.2	29.7	30.3	30.8
5500.00	23.6	-29.1	-24.1	-31.3	1.2	0.8	22.9	25.2	1.2	28.2	28.6	28.6	29.0	29.5	30.0	30.6
5600.00	23.7	-29.2	-24.0	-36.0	1.2	0.8	22.4	25.0	1.2	28.4	29.0	28.7	29.2	29.4	29.9	30.4
5700.00	23.5	-29.5	-27.5	-35.8	1.3	0.8	22.2	24.8	1.2	28.0	28.4	28.6	29.1	29.4	29.9	30.4
5800.00	23.7	-29.2	-25.3	-38.3	1.2	0.8	22.0	24.7	1.3	27.5	28.0	28.3	28.6	29.0	29.5	29.9
5900.00	23.7	-29.5	-22.1	-38.5	1.3	0.8	21.9	24.6	1.3	27.3	27.7	27.9	28.3	28.7	29.1	29.6
6000.00	23.6	-29.5	-23.1	-37.9	1.3	0.8	21.1	24.0	1.3	27.0	27.2	27.4	27.6	28.1	28.4	28.4
6100.00	23.8	-29.4	-19.3	-31.3	1.2	0.8	21.0	23.7	1.3	26.1	27.0	26.9	27.0	27.4	27.8	28.2
6200.00	23.7	-29.7	-17.0	-24.9	1.3	0.8	20.7	22.9	1.3	26.3	26.0	26.5	26.6	26.9	27.3	27.8
6300.00	23.7	-29.6	-16.7	-25.2	1.3	0.8	20.5	22.6	1.3	25.9	25.9	26.4	26.5	26.9	27.4	28.0
6400.00	23.8	-29.9	-14.1	-21.0												

TEST CONDITIONS: $V_{DD} = +6.25$ V, $V_{EN} = +6.25$ V, $I_{DD} = 118$ mA, $I_{EN} = 2.76$ mA @ Temperature = - 45°C

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	48.0	47.9	47.8	47.7	47.6	47.3	47.0
1000.0	45.6	45.5	45.4	45.3	45.2	45.0	44.9
2000.0	42.0	41.8	41.8	41.7	41.6	41.7	41.8
4000.0	41.2	41.1	41.1	41.0	41.0	41.0	41.3
6000.0	31.9	31.8	31.6	31.6	31.5	31.5	31.6
8000.0	37.7	37.5	37.4	37.3	37.7	38.4	40.0

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +6.25 V, V_{EN} = +6.25 V, I_{DD} = 126 mA, I_{EN} = 2.74 mA @ Temperature = -45°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure (dBm)										
5500.00	22.9	-29.8	-11.7	-11.1	1.3	0.7	22.4	24.6	1.2	29.7	28.8	29.6	29.8	30.2	30.6	31.1
5600.00	23.1	-29.8	-11.4	-11.2	1.3	0.7	22.1	24.5	1.1	27.6	28.9	28.7	29.2	29.6	30.0	30.4
5700.00	23.0	-29.9	-12.0	-11.5	1.3	0.7	21.9	24.4	1.1	28.2	28.2	28.6	28.9	29.3	29.8	30.2
5800.00	23.2	-29.9	-11.6	-11.6	1.3	0.7	21.8	24.4	1.1	28.2	28.1	28.4	28.7	29.1	29.6	30.0
5900.00	23.1	-29.9	-12.1	-11.9	1.3	0.8	21.3	24.0	1.1	28.4	27.4	28.0	28.2	28.7	29.0	29.4
6000.00	23.3	-30.0	-11.8	-11.9	1.3	0.8	20.4	23.3	1.1	25.8	26.5	26.6	26.8	27.1	27.5	27.7
6100.00	23.3	-29.9	-12.3	-12.3	1.3	0.8	20.8	23.4	1.1	26.7	26.8	26.8	27.1	27.5	27.8	28.2
6200.00	23.4	-30.0	-11.9	-12.1	1.3	0.8	20.7	23.1	1.1	25.7	26.3	26.0	26.4	26.7	27.1	27.6
6300.00	23.4	-29.9	-12.4	-12.5	1.3	0.8	21.2	23.4	1.1	26.6	26.6	26.6	27.0	27.3	27.8	28.4
6400.00	23.5	-30.1	-12.0	-12.2	1.3	0.8	21.3	23.4	1.1	26.5	26.9	26.6	26.9	27.2	27.8	28.4
6500.00	23.5	-30.1	-12.5	-12.7	1.3	0.8	21.2	23.2	1.2	26.1	26.9	26.6	26.9	27.3	27.8	28.5
6600.00	23.6	-30.4	-12.3	-12.6	1.3	0.8	21.4	23.3	1.2	26.4	26.7	26.8	27.0	27.5	28.0	28.7
6700.00	23.6	-30.3	-13.0	-13.1	1.3	0.8	21.3	23.2	1.2	26.8	26.6	26.4	26.9	27.3	27.9	28.7
6800.00	23.7	-30.5	-12.9	-12.9	1.3	0.8	21.4	23.2	1.2	27.1	26.4	26.9	27.1	27.6	28.2	28.9
6900.00	23.7	-30.5	-13.6	-13.5	1.3	0.8	21.6	23.3	1.2	26.7	26.7	26.8	27.2	27.6	28.3	29.1
7000.00	23.8	-30.7	-13.5	-13.3	1.3	0.8	21.6	23.3	1.2	26.1	26.1	26.5	26.7	27.3	27.8	28.7
7100.00	23.8	-30.8	-14.5	-14.0	1.3	0.8	21.6	23.2	1.3	26.6	26.2	26.5	27.0	27.5	28.1	28.9
7200.00	23.9	-31.1	-14.6	-13.9	1.4	0.8	21.8	23.3	1.3	25.9	26.5	26.6	26.8	27.3	27.9	28.8
7300.00	23.9	-31.2	-16.0	-14.8	1.4	0.8	21.8	23.3	1.3	25.9	25.8	26.0	26.5	26.9	27.6	28.5
7400.00	24.0	-31.6	-15.9	-14.8	1.4	0.8	22.0	23.4	1.4	25.6	25.8	26.0	26.3	26.9	27.6	28.5
7500.00	23.9	-31.7	-17.7	-16.0	1.5	0.8	21.6	23.0	1.5	25.1	26.1	25.8	26.3	26.8	27.5	28.5
7600.00	24.0	-32.2	-17.1	-15.9	1.5	0.8	21.7	22.9	1.5	25.4	25.4	25.7	26.1	26.7	27.3	28.2
7700.00	23.8	-32.3	-18.7	-17.6	1.6	0.9	22.0	22.9	1.6	24.1	24.5	24.9	25.2	25.7	26.5	27.6
7800.00	23.9	-33.1	-16.4	-17.7	1.7	0.9	21.5	22.6	1.6	25.1	24.7	25.4	25.7	26.3	27.0	28.0
7900.00	23.6	-33.3	-17.0	-20.8	1.7	0.9	21.3	22.3	1.7	24.6	24.8	25.1	25.5	26.1	26.8	27.9
8000.00	23.5	-34.4	-13.8	-20.7	1.9	1.0	20.8	22.0	1.8	23.9	24.1	24.4	24.8	25.5	26.4	27.7
8100.00	23.2	-34.6	-13.6	-25.1	2.0	1.0	20.9	21.8	1.9	23.6	23.8	24.2	24.6	25.2	26.1	27.4
8200.00	22.7	-36.6	-10.4	-19.5	2.5	1.0	20.6	21.4	2.1	22.8	23.3	23.8	24.6	25.6	26.7	27.2
8300.00	22.4	-36.3	-10.2	-19.4	2.4	1.0	20.7	21.3	2.2	23.0	23.2	23.5	24.0	24.6	25.7	27.2
8400.00	21.4	-39.3	-7.6	-13.6	3.3	1.1	20.3	20.8	2.4	23.1	23.0	23.6	24.1	24.7	25.9	27.4
8500.00	21.1	-39.0	-7.2	-12.7	3.2	1.1	19.8	20.3	2.5	21.6	21.6	22.1	22.8	23.7	24.9	26.9

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
5500.0	39.5	39.4	39.4	39.3	39.2	39.1	39.3
6000.0	34.0	33.9	33.8	33.7	33.7	33.6	33.7
7000.0	42.3	42.1	42.0	41.8	41.7	41.6	41.7
8000.0	51.0	50.9	50.8	50.6	50.4	50.3	50.4
8500.0	60.4	60.3	60.1	59.9	59.8	59.8	60.2



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +6.25$ V, $V_{EN} = 0$ V, $I_{DD} = 4$ mA, $I_{EN} = 0$ mA @ Temperature = -45°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	K	Stability Measure	Noise Figure (dB)
200.00	-3.7	-3.8	-3.9	-8.6	1.1	0.8	2.6
300.00	-2.3	-2.3	-6.6	-11.4	1.0	0.6	1.3
400.00	-1.7	-1.7	-9.2	-13.5	1.0	0.5	1.1
500.00	-1.4	-1.4	-11.8	-15.3	1.0	0.5	1.2
600.00	-1.2	-1.3	-14.7	-16.9	1.0	0.4	0.8
700.00	-1.2	-1.2	-18.0	-18.1	1.0	0.4	1.0
800.00	-1.1	-1.2	-22.0	-18.5	1.0	0.4	0.9
900.00	-1.1	-1.2	-27.4	-18.3	1.0	0.4	0.8
1000.00	-1.1	-1.1	-33.2	-17.9	1.0	0.4	0.8
1100.00	-1.1	-1.1	-28.0	-17.5	1.0	0.4	0.7
1200.00	-1.1	-1.2	-23.7	-17.0	1.0	0.4	0.6
1300.00	-1.1	-1.2	-21.0	-16.6	1.0	0.4	0.7
1400.00	-1.1	-1.2	-19.0	-16.0	1.0	0.4	0.5
1500.00	-1.2	-1.2	-17.5	-15.6	1.0	0.4	0.7
1600.00	-1.2	-1.3	-16.4	-15.4	1.0	0.4	0.8
1700.00	-1.2	-1.3	-15.6	-15.5	1.0	0.4	0.7
1800.00	-1.3	-1.4	-14.9	-15.4	1.0	0.5	1.1
1900.00	-1.3	-1.4	-14.4	-15.2	1.0	0.5	1.1
2000.00	-1.3	-1.5	-14.0	-15.1	1.0	0.5	1.0
2100.00	-1.4	-1.5	-13.8	-15.4	1.0	0.5	0.8
2200.00	-1.4	-1.5	-13.6	-15.6	1.0	0.5	0.8
2300.00	-1.4	-1.5	-13.5	-15.9	1.0	0.5	1.2
2400.00	-1.4	-1.6	-13.5	-16.4	1.0	0.5	1.2
2500.00	-1.4	-1.6	-13.4	-16.9	1.0	0.5	1.3
2600.00	-1.5	-1.7	-13.5	-17.6	1.0	0.6	1.3
2700.00	-1.5	-1.8	-13.7	-18.4	1.0	0.6	1.5
2800.00	-1.5	-1.8	-13.9	-19.5	1.1	0.6	1.8
2900.00	-1.5	-1.9	-14.1	-20.5	1.1	0.6	1.3
3000.00	-1.5	-1.9	-14.2	-21.7	1.1	0.6	1.7
3100.00	-1.5	-1.9	-14.3	-23.4	1.1	0.6	1.5
3200.00	-1.5	-1.9	-14.3	-25.7	1.1	0.6	1.4
3300.00	-1.5	-1.8	-14.3	-27.8	1.1	0.6	1.2
3400.00	-1.6	-1.8	-14.4	-30.0	1.1	0.6	1.3
3500.00	-1.6	-1.8	-14.4	-30.5	1.1	0.6	1.4
3600.00	-1.6	-1.8	-14.3	-27.5	1.1	0.6	1.4
3700.00	-1.6	-1.8	-14.1	-24.9	1.1	0.6	0.9
3800.00	-1.6	-1.8	-14.0	-22.9	1.1	0.6	1.6
3900.00	-1.6	-1.8	-13.8	-21.1	1.1	0.6	1.3
4000.00	-1.6	-1.9	-13.5	-19.4	1.1	0.6	1.2
4100.00	-1.7	-1.9	-13.2	-18.0	1.1	0.6	1.4
4200.00	-1.7	-1.9	-12.9	-16.9	1.1	0.6	1.4
4300.00	-1.7	-1.9	-12.7	-16.0	1.1	0.6	1.4
4400.00	-1.7	-2.0	-12.4	-15.1	1.1	0.6	1.3
4500.00	-1.7	-2.0	-12.1	-14.5	1.1	0.6	1.5
4600.00	-1.8	-2.0	-11.9	-13.9	1.1	0.6	0.9
4700.00	-1.8	-2.1	-11.7	-13.3	1.1	0.6	1.6
4800.00	-1.8	-2.1	-11.5	-13.0	1.1	0.6	1.5
4900.00	-1.8	-2.1	-11.4	-12.7	1.1	0.6	1.6
5000.00	-1.8	-2.1	-11.2	-12.4	1.1	0.6	1.5
5100.00	-1.8	-2.2	-11.1	-12.1	1.1	0.6	1.2
5200.00	-1.8	-2.2	-11.0	-11.9	1.1	0.6	1.1
5300.00	-1.8	-2.2	-11.0	-11.8	1.1	0.6	1.2
5400.00	-1.8	-2.3	-11.0	-11.7	1.1	0.6	1.2
5500.00	-1.8	-2.2	-10.9	-11.4	1.1	0.6	1.3
5600.00	-1.8	-2.2	-11.0	-11.4	1.1	0.6	1.6
5700.00	-1.8	-2.2	-11.1	-11.4	1.1	0.6	1.7
5800.00	-1.7	-2.2	-11.2	-11.3	1.1	0.5	1.7
5900.00	-1.7	-2.2	-11.4	-11.5	1.1	0.6	1.7
6000.00	-1.7	-2.2	-11.4	-11.3	1.1	0.5	1.5
6100.00	-1.7	-2.1	-11.7	-11.5	1.1	0.5	0.8
6200.00	-1.7	-2.2	-12.0	-11.7	1.1	0.5	1.9
6300.00	-1.6	-2.1	-12.1	-11.6	1.1	0.5	1.2
6400.00	-1.6	-2.1	-12.4	-11.8	1.1	0.5	1.5
6500.00	-1.7	-2.2	-12.6	-11.8	1.1	0.5	1.7
6600.00	-1.6	-2.1	-12.6	-11.8	1.1	0.5	0.8
6700.00	-1.6	-2.1	-13.0	-12.0	1.1	0.5	0.9
6800.00	-1.6	-2.1	-13.1	-12.1	1.1	0.5	1.1
6900.00	-1.6	-2.1	-13.1	-12.0	1.1	0.5	1.3
7000.00	-1.6	-2.2	-13.2	-12.0	1.1	0.6	1.8
7100.00	-1.7	-2.2	-13.0	-11.9	1.1	0.6	1.5
7200.00	-1.7	-2.2	-12.9	-11.9	1.1	0.6	1.9
7300.00	-1.8	-2.3	-12.8	-11.7	1.1	0.6	1.3
7400.00	-1.8	-2.3	-12.4	-11.4	1.1	0.6	1.2
7500.00	-1.9	-2.4	-12.1	-11.2	1.1	0.6	1.5
7600.00	-2.0	-2.5	-11.7	-10.9	1.1	0.6	1.6
7700.00	-2.0	-2.6	-11.1	-10.5	1.1	0.6	0.9
7800.00	-2.1	-2.6	-10.8	-10.2	1.1	0.6	1.7
7900.00	-2.3	-2.8	-10.3	-9.6	1.1	0.6	1.3
8000.00	-2.3	-2.8	-9.6	-9.1	1.1	0.6	2.3

TEST CONDITIONS: $V_{DD} = +6.25$ V, $V_{EN} = 0$ V, $I_{DD} = 4$ mA, $I_{EN} = 0$ mA @ Temperature = -45°C

FREQ (MHz)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
400.0	41.9	42.6	42.9	42.9	38.0	30.4	22.1
1000.0	42.5	43.6	44.5	38.9	30.1	20.7	16.2
2000.0	43.4	44.6	45.5	44.1	37.7	28.5	19.3
4000.0	41.0	41.8	42.3	43.0	43.0	39.6	31.1
6000.0	43.3	43.5	44.4	45.0	44.6	38.8	28.5
8000.0	44.3	44.3	45.1	45.5	44.8	39.6	29.4

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	69.2	69.1	68.9	68.7	68.1	66.1	56.0
1000.0	70.2	70.4	70.6	70.8	69.8	59.3	52.6
2000.0	69.5	69.5	69.5	69.6	69.5	67.4	56.2
4000.0	71.2	71.1	71.2	71.2	71.4	71.3	70.9
6000.0	74.7	74.5	74.3	74.0	73.6	72.9	69.6
8000.0	83.9	84.0	84.0	83.9	83.9	83.5	81.6

FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
400.0	15.9	13.1
1000.0	13.5	11.5
2000.0	15.2	12.8
4000.0	17.6	15.2
6000.0	18.4	15.3
8000.0	18.1	14.7



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Typical Performance Data

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Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +6.25 V, V_{EN} = 0 V, I_{DD} = 4 mA, I_{EN} = 0 mA @ Temperature = -45°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)	FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
					K	Measure				
5500.00	-1.6	-2.1	-20.9	-18.4	1.1	0.6	1.6	5500.0	17.5	14.5
5600.00	-1.5	-2.1	-21.5	-18.6	1.1	0.6	1.2	6000.0	18.5	15.3
5700.00	-1.5	-2.1	-21.4	-18.5	1.1	0.6	1.4	7000.0	20.3	16.4
5800.00	-1.5	-2.1	-20.8	-17.9	1.1	0.6	1.4	8000.0	20.5	15.1
5900.00	-1.5	-2.1	-19.6	-17.2	1.1	0.6	1.4	8500.0	19.1	13.8
6000.00	-1.5	-2.1	-18.7	-16.4	1.1	0.6	1.2			
6100.00	-1.5	-2.1	-17.4	-15.5	1.1	0.6	1.5			
6200.00	-1.6	-2.1	-16.4	-14.7	1.1	0.6	1.5			
6300.00	-1.6	-2.2	-15.2	-13.8	1.1	0.6	1.7			
6400.00	-1.6	-2.2	-14.4	-13.1	1.1	0.6	1.3			
6500.00	-1.7	-2.3	-13.5	-12.4	1.1	0.6	1.8			
6600.00	-1.7	-2.3	-12.7	-11.8	1.1	0.6	1.2			
6700.00	-1.8	-2.4	-11.8	-11.1	1.1	0.6	1.5			
6800.00	-1.9	-2.5	-11.1	-10.5	1.1	0.6	1.4			
6900.00	-2.0	-2.6	-10.4	-9.9	1.1	0.6	1.6			
7000.00	-2.1	-2.7	-9.8	-9.3	1.1	0.6	1.7			
7100.00	-2.2	-2.8	-9.1	-8.7	1.1	0.6	1.4			
7200.00	-2.3	-2.9	-8.6	-8.3	1.1	0.6	2.1			
7300.00	-2.5	-3.1	-8.0	-7.8	1.1	0.6	1.6			
7400.00	-2.6	-3.2	-7.5	-7.4	1.1	0.6	1.6			
7500.00	-2.8	-3.4	-7.0	-6.9	1.1	0.6	2.2			
7600.00	-2.9	-3.5	-6.6	-6.6	1.1	0.6	1.7			
7700.00	-3.1	-3.7	-6.1	-6.1	1.1	0.6	1.1			
7800.00	-3.3	-3.9	-5.8	-5.9	1.1	0.6	2.0			
7900.00	-3.5	-4.0	-5.4	-5.5	1.1	0.6	1.9			
8000.00	-3.7	-4.2	-5.2	-5.3	1.1	0.6	2.5			
8100.00	-3.9	-4.4	-4.8	-4.9	1.1	0.5	2.4			
8200.00	-4.1	-4.6	-4.6	-4.8	1.1	0.5	2.3			
8300.00	-4.3	-4.8	-4.2	-4.4	1.1	0.5	2.2			
8400.00	-4.5	-5.0	-4.1	-4.3	1.1	0.5	2.0			
8500.00	-4.6	-5.1	-3.8	-4.0	1.1	0.5	1.2			

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
5500.0	71.2	71.1	70.9	70.6	70.3	69.5	66.6	40.5	40.9	41.3	40.6	40.8	40.7	36.0
6000.0	78.1	77.9	77.8	77.5	77.3	76.9	76.1	39.1	39.7	40.2	41.8	41.7	40.6	31.8
7000.0	90.3	90.3	90.1	89.9	89.7	89.3	88.7	39.7	40.1	39.6	41.6	41.7	40.2	32.5
8000.0	84.3	84.3	84.2	84.2	84.2	84.0	83.7	41.1	41.4	41.6	39.9	39.8	39.5	37.4
8500.0	90.8	90.8	90.7	90.5	90.4	91.8	88.3	40.6	41.6	42.8	44.5	44.9	32.7	20.1



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IF/RF MICROWAVE COMPONENTS



Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +4.75 V, V_{EN} = +4.75 V, I_{DD} = 69 mA, I_{EN} = 2.04 mA @ Temperature = + 85°C

FREQ (GHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure										
200.00	14.4	-32.7	-1.9	-4.8	1.5	1.0	18.6	20.4	5.3	29.4	29.9	30.0	29.8	29.7	29.4	29.2
300.00	19.1	-27.8	-5.6	-8.9	1.2	0.8	18.9	20.5	2.9	28.9	29.2	30.6	30.6	30.3	30.0	30.0
400.00	20.6	-26.3	-11.2	-15.1	1.2	0.7	19.5	20.9	2.2	29.0	32.6	31.5	31.7	31.6	31.4	31.1
500.00	21.0	-25.9	-17.1	-20.4	1.1	0.7	19.8	20.9	1.9	31.9	30.5	31.7	31.8	31.5	31.5	31.1
600.00	21.1	-25.7	-20.0	-20.7	1.1	0.7	20.0	21.0	1.7	31.4	32.2	32.4	32.5	32.4	32.2	32.0
700.00	21.1	-25.8	-19.2	-19.5	1.1	0.7	20.2	21.2	1.6	31.8	32.0	32.1	31.9	31.7	31.7	31.5
800.00	21.1	-25.8	-18.1	-18.9	1.1	0.7	20.3	21.3	1.6	31.4	31.7	31.5	31.6	31.5	31.3	31.1
900.00	21.1	-25.8	-17.4	-18.8	1.1	0.7	20.4	21.4	1.6	30.4	32.3	32.2	31.7	31.7	31.5	31.3
1000.00	21.1	-25.9	-16.9	-19.1	1.1	0.7	20.4	21.4	1.6	32.5	31.3	32.5	32.2	32.2	32.1	31.9
1100.00	21.1	-25.9	-16.6	-19.8	1.1	0.7	20.3	21.3	1.6	32.1	32.3	31.9	31.9	31.6	31.6	31.4
1200.00	21.1	-25.9	-16.4	-20.8	1.1	0.7	20.4	21.5	1.6	32.0	31.2	31.7	31.4	31.3	31.2	31.1
1300.00	21.1	-25.9	-16.2	-22.1	1.1	0.7	20.4	21.5	1.6	31.2	31.3	30.7	30.9	30.8	30.7	30.6
1400.00	21.1	-26.0	-16.1	-23.8	1.2	0.7	20.3	21.4	1.6	31.2	31.6	31.7	31.3	31.2	31.1	31.1
1500.00	21.1	-26.1	-15.8	-26.3	1.2	0.7	20.3	21.6	1.6	30.4	29.6	30.5	30.2	30.0	29.9	29.7
1600.00	21.1	-26.2	-15.3	-29.3	1.2	0.7	20.2	21.5	1.7	30.3	30.0	30.8	30.6	30.5	30.4	30.3
1700.00	21.1	-26.2	-14.9	-30.0	1.2	0.7	20.4	21.7	1.7	29.9	30.5	30.1	30.1	30.0	29.9	29.8
1800.00	21.1	-26.3	-14.5	-28.6	1.2	0.7	20.1	21.6	1.7	29.8	30.1	30.2	29.9	30.0	29.9	29.7
1900.00	21.1	-26.4	-14.0	-25.6	1.2	0.7	20.0	21.6	1.8	28.2	29.9	29.0	29.1	29.0	28.8	28.7
2000.00	21.1	-26.4	-13.4	-22.8	1.2	0.7	19.9	21.5	1.8	29.7	29.3	29.5	29.5	29.4	29.3	29.1
2100.00	21.1	-26.6	-12.8	-20.9	1.2	0.8	20.0	21.7	1.8	28.6	30.3	29.3	29.4	29.2	29.1	28.9
2200.00	21.0	-26.7	-12.3	-19.3	1.2	0.8	19.8	21.6	1.8	29.8	30.1	30.0	29.8	29.6	29.4	29.3
2300.00	21.0	-26.8	-11.8	-17.8	1.2	0.8	19.7	21.6	1.8	29.6	30.2	29.3	29.4	29.2	29.1	28.9
2400.00	21.0	-26.9	-11.3	-16.7	1.2	0.8	19.6	21.8	1.8	28.1	28.6	28.0	28.0	27.7	27.6	27.6
2500.00	20.9	-27.0	-10.9	-15.8	1.2	0.8	19.5	21.8	1.9	27.8	29.1	27.9	28.0	27.8	27.6	27.5
2600.00	20.9	-27.1	-10.6	-14.9	1.2	0.8	19.3	21.9	1.9	27.4	27.3	27.9	27.8	27.6	27.4	27.2
2700.00	20.8	-27.3	-10.2	-14.3	1.2	0.8	19.0	21.5	2.0	27.6	27.9	28.3	28.2	28.1	27.9	27.7
2800.00	20.8	-27.4	-9.9	-13.7	1.2	0.8	18.9	21.4	2.0	27.6	28.3	28.0	27.9	27.6	27.4	27.1
2900.00	20.8	-27.5	-9.6	-13.1	1.3	0.8	18.6	21.2	1.9	27.1	26.8	26.8	26.6	26.5	26.3	26.0
3000.00	20.7	-27.5	-9.4	-12.7	1.3	0.8	18.9	21.5	2.0	27.6	27.0	27.0	26.8	26.6	26.4	26.1
3100.00	20.7	-27.6	-9.1	-12.3	1.3	0.8	18.8	21.8	2.1	25.8	27.1	26.5	26.4	26.1	25.9	25.7
3200.00	20.7	-27.7	-8.9	-12.1	1.3	0.8	18.8	21.6	2.0	26.5	27.4	26.8	26.7	26.6	26.3	26.1
3300.00	20.7	-27.7	-8.8	-11.9	1.3	0.8	18.7	21.5	2.0	26.8	26.9	26.8	26.7	26.4	26.2	25.9
3400.00	20.7	-27.8	-8.7	-11.8	1.3	0.8	18.6	21.5	2.0	26.8	26.7	27.0	27.0	26.9	26.7	26.5
3500.00	20.7	-27.8	-8.7	-11.8	1.3	0.8	18.7	21.6	2.0	26.7	26.9	26.5	26.4	26.2	25.9	25.7
3600.00	20.7	-27.9	-8.7	-11.9	1.3	0.8	18.8	21.7	2.0	26.1	26.9	26.3	26.2	26.1	25.8	25.6
3700.00	20.8	-27.8	-8.8	-12.0	1.3	0.8	18.9	21.7	2.0	27.2	27.4	27.5	27.4	27.3	27.1	26.8
3800.00	20.8	-27.9	-8.9	-12.2	1.3	0.8	19.0	21.7	1.9	26.8	27.0	26.4	26.3	26.2	25.9	25.7
3900.00	20.8	-27.9	-9.1	-12.4	1.3	0.8	19.1	21.7	1.9	27.5	27.4	26.9	26.5	26.4	26.2	25.9
4000.00	20.9	-28.1	-9.3	-12.7	1.3	0.8	19.2	21.9	1.9	26.6	27.4	27.1	27.0	26.8	26.6	26.3
4100.00	20.9	-27.9	-9.6	-13.2	1.3	0.8	19.3	21.9	1.9	26.5	26.7	26.4	26.6	26.3	26.2	25.8
4200.00	21.0	-28.0	-9.9	-13.7	1.3	0.8	19.3	21.9	1.9	26.3	26.8	26.7	26.5	26.3	26.1	25.8
4300.00	21.1	-28.1	-10.2	-14.0	1.3	0.8	19.3	22.0	1.8	26.9	26.5	26.8	26.7	26.5	26.3	26.0
4400.00	21.1	-28.0	-10.7	-14.6	1.3	0.8	19.3	22.1	1.9	27.4	26.4	26.6	26.3	26.2	25.9	25.6
4500.00	21.2	-28.1	-11.0	-15.2	1.3	0.8	19.2	22.1	1.9	26.1	26.3	26.4	26.4	26.1	25.8	25.4
4600.00	21.2	-28.2	-11.6	-15.8	1.3	0.8	18.9	22.1	1.8	26.6	26.2	26.1	26.1	25.9	25.6	25.2
4700.00	21.3	-28.2	-12.1	-16.5	1.3	0.8	18.9	21.9	1.9	26.4	26.1	25.9	25.9	25.6	25.3	25.0
4800.00	21.4	-28.3	-12.5	-16.8	1.3	0.8	19.0	21.7	1.9	26.7	26.4	26.5	26.5	26.2	25.9	25.6
4900.00	21.4	-28.4	-13.1	-17.3	1.3	0.8	18.8	21.7	1.9	25.8	26.3	25.9	25.7	25.5	24.8	24.6
5000.00	21.5	-28.4	-13.5	-18.1	1.3	0.8	18.8	21.6	1.9	26.1	26.0	25.5	25.4	25.1	24.8	24.5
5100.00	21.5	-28.6	-13.8	-18.3	1.4	0.8	19.0	21.3	1.9	25.5	26.5	25.5	25.4	25.2	25.0	24.8
5200.00	21.5	-28.6	-14.3	-18.6	1.4	0.8	19.1	21.3	1.9	25.9	26.4	25.8	25.7	25.6	25.4	25.2
5300.00	21.6	-28.7	-14.1	-18.7	1.4	0.8	19.0	21.5	1.9	25.7	26.6	26.6	26.5	25.3	25.1	25.0
5400.00	21.5	-28.9	-14.0	-18.3	1.4	0.8	18.6	21.6	1.9	25.5	26.1	25.5	25.4	25.2	24.9	24.7
5500.00	21.5	-28.8	-14.1	-18.8	1.4	0.8	18.1	21.4	1.8	24.7	25.9	24.7	24.6	24.3	24.0	23.8
5600.00	21.6	-29.0	-13.0	-18.1	1.4	0.9	17.4	21.1	1.9	25.2	25.3	25.0	24.7	24.4	23.9	23.6
5700.00	21.4	-29.3	-12.6	-17.3	1.4	0.9	17.2	20.8	1.9	24.3	25.3	24.1	23.8	23.4	22.8	22.8
5800.00	21.5	-29.3	-12.1	-17.4	1.4	0.9	17.1	20.4	1.9	24.4	24.9	24.0	23.7	23.3	22.8	22.9
5900.00	21.4	-29.6	-10.8	-16.0	1.4	0.9	17.2	20.1	2.0	24.6	24.3	24.3	23.9	23.6	23.1	23.1
6000.00	21.2	-29.7	-10.6	-15.7	1.5	0.9	17.1	19.6	1.9	23.8	24.4	23.8	23.6	23.2	22.6	22.6
6100.00	21.3	-29.8	-9.6	-15.0	1.5	0.9	17.1	19.3	2.0	24.5	24.5	24.3	24.0	23.7	23.2	23.2
6200.00	21.1	-30.4	-8.7	-13.7	1.5	1.0	17.1	19.0	2.1	24.0	23.7	24.0	23.7	23.3	23.0	22.9
6300.00	20.9	-30.4	-8.4	-13.3	1.5	1.0	16.9	18.7	2.1	23.2	24.0	23.3	23.1	22.8	22.5	22.7
6400.00	20.9	-30.7	-7.4	-12.3	1.5	1.0	17									

TEST CONDITIONS: $V_{DD} = +4.75$ V, $V_{EN} = +4.75$ V, $I_{DD} = 69$ mA, $I_{EN} = 2.04$ mA @ Temperature = + 85°C

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	38.3	38.3	38.3	38.1	38.1	37.7	37.4
1000.0	37.6	37.5	37.5	37.4	37.2	36.9	36.5
2000.0	37.3	36.9	36.7	36.5	36.2	35.9	35.5
4000.0	43.9	43.8	43.6	43.3	43.0	42.7	42.6
6000.0	32.8	32.6	32.3	32.0	31.5	31.1	30.9
8000.0	36.8	36.4	36.1	36.2	37.0	39.0	41.7

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +4.75$ V, $V_{EN} = +4.75$ V, $I_{DD} = 74$ mA, $I_{EN} = 2.02$ mA @ Temperature = $+85^{\circ}\text{C}$

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure (dBm)										
5500.00	20.7	-29.7	-8.9	-8.1	1.4	0.8	17.1	21.3	2.0	26.1	25.9	25.8	25.6	25.3	24.9	
5600.00	20.8	-29.8	-8.7	-8.2	1.4	0.8	16.6	21.1	2.0	25.0	24.7	24.5	24.2	23.8	23.4	
5700.00	20.8	-29.7	-9.0	-8.4	1.4	0.8	16.4	20.8	2.0	25.1	25.0	24.9	24.5	24.0	23.5	
5800.00	20.9	-29.8	-8.8	-8.5	1.4	0.8	16.5	20.5	2.0	25.1	25.3	25.0	24.8	24.5	23.5	
5900.00	20.9	-29.8	-9.0	-8.8	1.4	0.8	16.6	20.0	2.0	24.8	25.3	24.7	24.5	24.1	23.6	
6000.00	21.0	-29.9	-8.7	-8.8	1.4	0.8	16.6	19.6	2.0	23.9	24.0	23.5	23.2	22.7	22.3	
6100.00	21.1	-29.9	-9.0	-9.1	1.4	0.8	17.3	19.6	2.0	24.8	24.7	24.4	24.3	24.0	23.5	
6200.00	21.1	-30.2	-8.7	-9.1	1.5	0.8	17.6	19.6	2.0	24.2	24.2	24.1	23.8	23.6	23.2	
6300.00	21.2	-30.1	-8.9	-9.4	1.5	0.8	17.9	19.7	2.0	25.2	25.3	25.2	24.9	24.8	24.4	
6400.00	21.2	-30.4	-8.6	-9.4	1.5	0.8	18.0	19.7	2.0	25.3	25.1	24.9	24.7	24.5	24.5	
6500.00	21.2	-30.4	-8.8	-9.8	1.5	0.8	18.1	19.7	2.1	25.5	25.3	25.2	25.1	24.9	24.8	
6600.00	21.3	-30.6	-8.6	-9.9	1.5	0.9	18.4	19.8	2.0	25.6	25.2	25.3	25.1	25.0	24.8	
6700.00	21.3	-30.6	-8.9	-10.3	1.5	0.9	18.4	19.7	2.1	25.4	25.3	25.1	25.0	25.0	24.8	
6800.00	21.3	-31.0	-8.7	-10.4	1.6	0.9	18.5	19.8	2.1	25.6	25.4	25.6	25.5	25.3	25.2	
6900.00	21.3	-31.0	-9.0	-10.9	1.6	0.9	18.6	19.8	2.1	25.9	26.3	25.7	25.7	25.7	25.7	
7000.00	21.3	-31.4	-8.7	-11.1	1.7	0.9	18.7	19.8	2.2	25.9	25.2	25.3	25.3	25.2	25.3	
7100.00	21.2	-31.4	-9.0	-11.7	1.7	0.9	18.7	19.8	2.2	25.7	26.0	25.8	25.7	25.6	25.7	
7200.00	21.2	-31.9	-8.8	-11.9	1.8	0.9	18.7	19.8	2.2	26.0	26.1	25.7	25.7	25.7	25.8	
7300.00	21.0	-32.1	-9.2	-12.6	1.8	1.0	18.7	19.7	2.3	26.0	25.9	25.3	25.2	25.2	25.5	
7400.00	21.0	-32.6	-8.9	-12.9	1.9	1.0	18.8	19.8	2.3	25.3	25.4	25.5	25.4	25.3	25.6	
7500.00	20.8	-32.8	-9.1	-13.8	2.0	1.0	18.4	19.4	2.4	25.5	26.0	25.5	25.5	25.5	25.9	
7600.00	20.6	-33.6	-8.6	-14.0	2.2	1.0	18.4	19.4	2.5	26.1	25.5	25.5	25.5	25.5	25.7	
7700.00	20.3	-33.8	-8.7	-15.1	2.3	1.0	18.5	19.3	2.6	24.4	24.6	24.3	24.3	24.4	24.7	
7800.00	20.0	-34.8	-8.0	-15.1	2.6	1.1	18.1	19.0	2.7	25.4	25.7	25.4	25.3	25.5	25.8	
7900.00	19.5	-35.0	-8.0	-16.0	2.8	1.1	17.9	18.8	2.8	25.5	25.7	25.4	25.4	25.6	25.9	
8000.00	19.0	-36.5	-7.1	-15.0	3.3	1.1	17.6	18.5	2.9	24.9	24.8	24.7	24.8	24.9	25.1	
8100.00	18.4	-36.7	-6.8	-14.9	3.5	1.2	17.5	18.3	3.0	25.0	24.7	24.8	24.8	24.9	25.1	
8200.00	17.5	-38.3	-5.8	-13.2	4.2	1.2	17.2	18.0	3.2	24.3	24.3	24.1	24.2	24.4	24.1	
8300.00	16.9	-38.4	-5.5	-12.4	4.3	1.2	17.0	17.7	3.4	24.4	24.9	24.6	24.5	24.6	24.8	
8400.00	15.6	-40.7	-4.6	-10.5	5.7	1.2	16.6	17.3	3.6	25.2	24.9	25.2	24.9	24.9	25.0	
8500.00	14.8	-40.9	-4.2	-9.7	6.0	1.2	16.1	16.8	3.8	24.1	23.8	23.8	23.7	23.6	22.3	

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)
5500.0	35.6	35.6	35.5	35.1	34.9	34.5	34.2
6000.0	33.8	33.7	33.4	33.0	32.7	32.2	31.9
7000.0	44.0	43.9	43.6	43.3	43.0	42.7	42.6
8000.0	51.9	51.8	51.5	51.1	50.8	50.4	50.5
8500.0	60.0	59.7	59.4	59.0	58.6	58.6	59.2



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +4.75$ V, $V_{EN} = 0$ V, $I_{DD} = 3$ mA, $I_{EN} = 0$ mA @ Temperature = +85°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)
					K	Measure	
200.00	-3.7	-3.8	-4.0	-9.0	1.1	0.9	3.5
300.00	-2.3	-2.4	-6.7	-11.8	1.0	0.7	2.2
400.00	-1.7	-1.8	-9.3	-14.0	1.0	0.6	2.1
500.00	-1.4	-1.5	-12.1	-15.7	1.0	0.5	1.9
600.00	-1.3	-1.4	-15.0	-17.0	1.0	0.5	1.3
700.00	-1.2	-1.3	-18.2	-17.9	1.0	0.4	1.4
800.00	-1.2	-1.3	-22.2	-18.1	1.0	0.4	1.5
900.00	-1.2	-1.2	-27.4	-17.8	1.0	0.4	1.4
1000.00	-1.1	-1.2	-31.3	-17.4	1.0	0.4	1.3
1100.00	-1.1	-1.2	-26.8	-17.1	1.0	0.4	1.6
1200.00	-1.1	-1.3	-23.1	-16.8	1.0	0.4	1.5
1300.00	-1.1	-1.3	-20.6	-16.4	1.0	0.4	1.1
1400.00	-1.2	-1.3	-18.8	-15.9	1.0	0.4	1.4
1500.00	-1.2	-1.4	-17.4	-15.6	1.0	0.4	1.6
1600.00	-1.3	-1.4	-16.3	-15.4	1.0	0.5	1.7
1700.00	-1.3	-1.5	-15.4	-15.4	1.0	0.5	1.4
1800.00	-1.3	-1.5	-14.8	-15.3	1.0	0.5	1.8
1900.00	-1.4	-1.6	-14.2	-15.1	1.0	0.5	1.7
2000.00	-1.4	-1.6	-13.8	-15.0	1.0	0.5	1.7
2100.00	-1.4	-1.6	-13.5	-15.2	1.0	0.5	1.5
2200.00	-1.4	-1.7	-13.3	-15.4	1.0	0.5	1.9
2300.00	-1.5	-1.7	-13.2	-15.6	1.0	0.5	1.9
2400.00	-1.5	-1.8	-13.1	-15.9	1.0	0.6	2.0
2500.00	-1.5	-1.8	-13.0	-16.3	1.0	0.6	2.0
2600.00	-1.6	-1.9	-13.1	-16.9	1.1	0.6	2.1
2700.00	-1.6	-1.9	-13.2	-17.6	1.1	0.6	2.0
2800.00	-1.6	-2.0	-13.3	-18.4	1.1	0.6	2.2
2900.00	-1.6	-2.0	-13.5	-19.2	1.1	0.6	2.1
3000.00	-1.6	-2.0	-13.7	-20.3	1.1	0.6	2.2
3100.00	-1.6	-2.0	-13.8	-21.8	1.1	0.6	2.2
3200.00	-1.6	-2.0	-13.9	-23.6	1.1	0.6	2.1
3300.00	-1.6	-2.0	-14.0	-25.3	1.1	0.6	2.3
3400.00	-1.7	-2.0	-14.1	-27.3	1.1	0.7	2.2
3500.00	-1.7	-2.0	-14.0	-28.3	1.1	0.7	2.2
3600.00	-1.7	-2.0	-14.0	-26.7	1.1	0.7	2.0
3700.00	-1.7	-2.0	-13.9	-24.2	1.1	0.7	2.1
3800.00	-1.7	-2.1	-13.7	-22.1	1.1	0.7	2.4
3900.00	-1.7	-2.1	-13.5	-20.4	1.1	0.6	2.2
4000.00	-1.8	-2.1	-13.2	-18.8	1.1	0.6	2.2
4100.00	-1.8	-2.1	-12.9	-17.4	1.1	0.6	2.1
4200.00	-1.8	-2.1	-12.6	-16.3	1.1	0.6	1.9
4300.00	-1.8	-2.2	-12.4	-15.5	1.1	0.6	2.0
4400.00	-1.8	-2.2	-12.1	-14.8	1.1	0.6	2.0
4500.00	-1.8	-2.2	-11.8	-14.1	1.1	0.6	2.3
4600.00	-1.9	-2.3	-11.6	-13.5	1.1	0.6	2.2
4700.00	-1.9	-2.3	-11.4	-13.1	1.1	0.6	2.2
4800.00	-1.9	-2.3	-11.3	-12.8	1.1	0.6	2.0
4900.00	-1.9	-2.4	-11.2	-12.5	1.1	0.6	2.0
5000.00	-1.9	-2.4	-11.1	-12.1	1.1	0.6	1.6
5100.00	-1.9	-2.4	-11.0	-11.9	1.1	0.6	2.2
5200.00	-1.9	-2.4	-11.0	-11.8	1.1	0.6	2.0
5300.00	-1.9	-2.4	-11.0	-11.7	1.1	0.6	1.3
5400.00	-1.9	-2.4	-11.0	-11.6	1.1	0.6	1.6
5500.00	-1.9	-2.4	-11.0	-11.5	1.1	0.6	2.0
5600.00	-1.9	-2.4	-11.3	-11.6	1.1	0.6	1.8
5700.00	-1.9	-2.5	-11.3	-11.6	1.1	0.6	2.1
5800.00	-1.8	-2.4	-11.5	-11.6	1.1	0.6	1.8
5900.00	-1.8	-2.4	-11.8	-11.8	1.1	0.6	1.6
6000.00	-1.8	-2.4	-11.9	-11.8	1.1	0.6	1.3
6100.00	-1.7	-2.4	-12.3	-12.0	1.1	0.6	1.6
6200.00	-1.7	-2.4	-12.7	-12.3	1.1	0.6	1.7
6300.00	-1.7	-2.4	-12.9	-12.3	1.1	0.6	1.7
6400.00	-1.7	-2.3	-13.3	-12.6	1.1	0.6	2.3
6500.00	-1.7	-2.4	-13.6	-12.7	1.1	0.6	1.9
6600.00	-1.6	-2.3	-13.8	-12.8	1.1	0.6	1.5
6700.00	-1.6	-2.3	-14.4	-13.1	1.1	0.6	1.7
6800.00	-1.6	-2.4	-14.6	-13.2	1.1	0.6	2.1
6900.00	-1.6	-2.3	-14.7	-13.2	1.1	0.6	2.2
7000.00	-1.6	-2.4	-14.9	-13.4	1.1	0.6	1.6
7100.00	-1.7	-2.4	-14.8	-13.4	1.1	0.6	1.7
7200.00	-1.7	-2.4	-14.7	-13.4	1.1	0.6	1.7
7300.00	-1.7	-2.5	-14.5	-13.2	1.1	0.6	2.2
7400.00	-1.8	-2.5	-14.0	-12.8	1.1	0.6	1.7
7500.00	-1.9	-2.6	-13.5	-12.6	1.1	0.6	1.5
7600.00	-2.0	-2.7	-13.0	-12.3	1.1	0.6	1.4
7700.00	-2.1	-2.8	-12.2	-11.6	1.2	0.6	1.5
7800.00	-2.2	-2.9	-11.7	-11.2	1.2	0.7	0.8
7900.00	-2.4	-3.1	-11.1	-10.6	1.2	0.7	1.5
8000.00	-2.4	-3.1	-10.1	-9.9	1.2	0.7	1.5

TEST CONDITIONS: $V_{DD} = +4.75$ V, $V_{EN} = 0$ V, $I_{DD} = 3$ mA, $I_{EN} = 0$ mA @ Temperature = $+85^\circ\text{C}$

FREQ (MHz)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
400.0	32.3	30.9	28.6	25.3	20.7	15.8	15.0
1000.0	34.3	33.0	30.8	27.4	21.8	15.3	15.6
2000.0	36.5	35.6	34.1	31.7	27.9	21.0	16.7
4000.0	36.8	36.8	36.1	34.7	32.2	28.4	22.2
6000.0	37.9	37.5	36.7	34.8	31.7	26.5	18.7
8000.0	38.3	38.0	37.1	35.3	32.3	27.4	18.6

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	71.9	71.7	70.6	67.9	61.1	48.3	46.4
1000.0	71.4	71.5	71.6	70.7	63.6	52.0	54.8
2000.0	72.1	71.9	71.6	71.1	69.3	61.8	52.9
4000.0	72.2	72.2	72.2	72.6	73.1	73.3	58.2
6000.0	72.4	72.3	72.0	71.7	71.0	67.8	58.5
8000.0	83.7	83.6	83.5	83.3	82.6	80.4	71.3

FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
400.0	12.4	9.5
1000.0	12.0	9.8
2000.0	13.7	11.4
4000.0	15.9	13.4
6000.0	16.3	13.5
8000.0	16.2	12.9



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MMIC Amplifier

TSY-83LN+

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +4.75$ V, $V_{EN} = 0$ V, $I_{DD} = 3$ mA, $I_{EN} = 0$ mA @ Temperature = +85°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)	FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
					K	Measure				
5500.00	-1.7	-2.4	-20.3	-17.5	1.1	0.7	2.8	5500.0	15.6	12.3
5600.00	-1.7	-2.4	-20.8	-17.4	1.1	0.7	2.6	6000.0	16.0	13.0
5700.00	-1.7	-2.4	-20.6	-17.1	1.1	0.7	2.6	7000.0	17.7	13.9
5800.00	-1.7	-2.4	-20.1	-16.5	1.1	0.7	2.7	8000.0	18.3	12.9
5900.00	-1.7	-2.4	-19.1	-16.0	1.1	0.7	2.8	8500.0	17.1	11.6
6000.00	-1.7	-2.4	-18.3	-15.3	1.1	0.7	2.5			
6100.00	-1.7	-2.5	-17.2	-14.6	1.1	0.7	2.7			
6200.00	-1.7	-2.5	-16.3	-14.0	1.1	0.7	3.0			
6300.00	-1.7	-2.5	-15.3	-13.3	1.1	0.7	2.7			
6400.00	-1.7	-2.6	-14.5	-12.8	1.1	0.7	2.6			
6500.00	-1.8	-2.6	-13.7	-12.2	1.1	0.7	2.6			
6600.00	-1.8	-2.7	-13.0	-11.7	1.1	0.7	2.7			
6700.00	-1.9	-2.7	-12.3	-11.1	1.1	0.7	2.8			
6800.00	-1.9	-2.8	-11.7	-10.7	1.1	0.7	3.0			
6900.00	-2.0	-2.9	-11.0	-10.2	1.1	0.6	3.0			
7000.00	-2.1	-3.0	-10.5	-9.7	1.1	0.6	3.1			
7100.00	-2.2	-3.1	-9.8	-9.2	1.1	0.6	2.7			
7200.00	-2.3	-3.2	-9.3	-8.8	1.1	0.6	3.0			
7300.00	-2.4	-3.3	-8.8	-8.4	1.1	0.6	3.3			
7400.00	-2.5	-3.4	-8.3	-8.0	1.1	0.6	2.8			
7500.00	-2.7	-3.6	-7.8	-7.6	1.1	0.6	3.4			
7600.00	-2.8	-3.7	-7.4	-7.2	1.2	0.6	3.2			
7700.00	-3.0	-3.9	-6.9	-6.8	1.2	0.6	3.1			
7800.00	-3.2	-4.0	-6.5	-6.5	1.2	0.6	2.9			
7900.00	-3.4	-4.2	-6.1	-6.1	1.2	0.6	3.8			
8000.00	-3.6	-4.4	-5.8	-5.8	1.2	0.6	3.8			
8100.00	-3.8	-4.6	-5.3	-5.4	1.2	0.6	3.9			
8200.00	-4.0	-4.8	-5.1	-5.2	1.2	0.6	3.9			
8300.00	-4.2	-5.0	-4.7	-4.8	1.2	0.6	3.8			
8400.00	-4.5	-5.2	-4.5	-4.7	1.2	0.6	3.4			
8500.00	-4.6	-5.4	-4.2	-4.4	1.2	0.6	3.3			

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
5500.0	69.7	69.7	69.5	69.4	68.6	65.6	60.3	39.6	39.1	38.3	37.7	35.3	31.7	26.0
6000.0	75.2	75.2	75.2	75.1	74.9	74.1	70.0	39.1	38.9	38.8	37.0	34.1	29.5	20.3
7000.0	86.7	86.5	86.4	86.2	85.7	84.4	79.7	39.4	39.6	39.1	36.4	33.6	29.8	24.0
8000.0	84.0	84.0	83.9	83.7	83.3	82.2	77.3	39.5	39.3	38.7	38.1	36.3	33.1	27.6
8500.0	92.6	92.5	92.5	92.5	92.4	91.1	92.8	38.8	38.1	37.0	34.3	29.9	21.9	16.2



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +5.0$ V, $V_{EN} = +5.0$ V, $I_{DD} = 75$ mA, $I_{EN} = 2.15$ mA @ Temperature = + 85°C

FREQ (GHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure										
200.00	14.6	-32.7	-1.9	-4.7	1.5	1.0	18.8	20.3	5.3	30.9	31.5	30.6	30.8	30.2	30.0	
300.00	19.3	-27.9	-5.7	-8.9	1.2	0.8	19.2	20.6	2.9	31.0	31.4	31.1	31.7	31.3	31.0	
400.00	20.8	-26.4	-11.5	-15.1	1.2	0.7	19.8	21.1	2.2	30.9	31.1	32.4	32.7	32.6	32.4	
500.00	21.2	-26.0	-17.5	-19.9	1.1	0.7	20.2	21.3	1.9	31.7	31.8	32.1	32.8	32.7	32.5	
600.00	21.3	-25.9	-19.8	-19.6	1.1	0.7	20.5	21.5	1.7	33.0	33.0	33.3	33.4	33.6	33.3	
700.00	21.3	-25.9	-18.6	-18.5	1.1	0.6	20.7	21.7	1.5	32.0	33.9	33.1	32.7	33.0	32.5	
800.00	21.3	-26.0	-17.6	-17.9	1.1	0.7	20.9	21.8	1.6	31.2	33.0	32.1	32.3	32.5	32.1	
900.00	21.3	-26.0	-16.9	-17.8	1.1	0.7	21.0	21.9	1.6	34.1	32.7	33.0	32.8	32.7	32.6	
1000.00	21.3	-26.0	-16.4	-18.1	1.1	0.7	21.0	21.9	1.6	31.1	33.4	33.2	33.4	33.2	32.9	
1100.00	21.3	-26.1	-16.3	-18.7	1.1	0.7	20.9	21.9	1.6	31.9	33.6	33.2	32.6	32.7	32.4	
1200.00	21.3	-26.1	-16.2	-19.5	1.1	0.7	21.1	22.0	1.6	33.0	33.2	32.5	32.3	32.4	32.0	
1300.00	21.3	-26.1	-16.1	-20.6	1.1	0.7	21.1	22.1	1.6	30.7	32.5	32.1	31.9	31.7	31.5	
1400.00	21.3	-26.2	-16.1	-22.1	1.2	0.7	21.0	22.0	1.6	33.4	32.2	32.3	32.4	32.3	32.0	
1500.00	21.3	-26.3	-16.0	-24.2	1.2	0.7	20.9	22.1	1.6	31.7	31.1	31.4	31.1	30.9	30.7	
1600.00	21.3	-26.4	-15.6	-26.8	1.2	0.7	21.0	22.1	1.7	30.7	31.1	31.8	31.5	31.5	31.2	
1700.00	21.3	-26.4	-15.3	-28.4	1.2	0.7	21.1	22.2	1.7	30.9	30.7	31.7	31.0	30.9	30.7	
1800.00	21.3	-26.5	-15.0	-29.3	1.2	0.7	20.9	22.2	1.8	32.3	30.9	31.0	31.0	30.9	30.6	
1900.00	21.3	-26.5	-14.5	-27.3	1.2	0.7	20.8	22.2	1.8	29.5	30.9	30.2	30.1	29.9	29.6	
2000.00	21.3	-26.6	-14.0	-24.4	1.2	0.7	20.5	22.0	1.8	34.0	30.8	30.5	30.5	30.2	30.0	
2100.00	21.3	-26.7	-13.4	-22.2	1.2	0.8	20.7	22.2	1.8	29.1	30.7	30.0	30.2	30.1	29.8	
2200.00	21.3	-26.8	-12.9	-20.5	1.2	0.8	20.5	22.1	1.8	28.9	30.8	31.3	30.7	30.6	30.5	
2300.00	21.2	-26.9	-12.3	-18.8	1.2	0.8	20.5	22.3	1.9	30.2	30.5	30.4	30.2	30.0	29.8	
2400.00	21.2	-27.1	-11.8	-17.5	1.2	0.8	20.3	22.3	1.9	28.8	29.5	29.3	29.0	28.7	28.4	
2500.00	21.2	-27.1	-11.4	-16.5	1.2	0.8	20.1	22.4	1.9	29.5	29.9	28.9	28.9	28.6	28.3	
2600.00	21.1	-27.3	-11.0	-15.6	1.2	0.8	19.9	22.4	1.9	28.9	28.4	28.6	28.6	28.4	28.1	
2700.00	21.1	-27.4	-10.7	-14.9	1.2	0.8	19.6	22.0	2.0	29.4	28.8	29.2	29.3	29.0	28.6	
2800.00	21.1	-27.5	-10.3	-14.3	1.2	0.8	19.5	21.8	2.0	28.9	28.8	28.9	28.7	28.5	28.1	
2900.00	21.0	-27.6	-10.0	-13.6	1.2	0.8	19.2	21.7	2.0	28.1	27.6	27.8	27.5	27.2	26.9	
3000.00	21.0	-27.6	-9.7	-13.2	1.3	0.8	19.4	21.9	2.0	26.9	27.5	27.9	27.8	27.6	27.0	
3100.00	21.0	-27.8	-9.4	-12.8	1.3	0.8	19.3	22.1	2.1	27.4	27.8	27.5	27.3	27.1	26.5	
3200.00	20.9	-27.8	-9.2	-12.5	1.3	0.8	19.3	22.1	2.0	27.9	28.3	27.8	27.7	27.5	27.0	
3300.00	20.9	-27.8	-9.1	-12.4	1.3	0.8	19.1	21.9	2.0	27.8	28.1	27.7	27.6	27.4	26.8	
3400.00	20.9	-27.9	-9.0	-12.2	1.3	0.8	18.9	21.7	2.1	28.3	27.8	27.8	28.0	27.8	27.4	
3500.00	21.0	-27.9	-9.0	-12.2	1.3	0.8	19.1	21.9	2.0	27.4	27.8	27.2	27.3	27.1	26.9	
3600.00	21.0	-27.9	-9.0	-12.3	1.3	0.8	19.1	21.9	2.0	27.5	27.3	27.1	27.1	27.0	26.8	
3700.00	21.0	-28.0	-9.0	-12.4	1.3	0.8	19.3	22.1	2.0	27.6	28.5	28.1	28.1	28.2	27.8	
3800.00	21.1	-28.0	-9.2	-12.6	1.3	0.8	19.3	22.1	2.1	26.8	28.4	27.2	27.3	27.1	26.6	
3900.00	21.1	-28.1	-9.3	-12.9	1.3	0.8	19.4	22.2	2.0	27.7	28.5	27.8	27.5	27.4	27.0	
4000.00	21.1	-28.1	-9.5	-13.2	1.3	0.8	19.3	22.3	1.9	27.3	27.5	28.0	27.8	27.6	27.3	
4100.00	21.2	-28.1	-9.8	-13.7	1.3	0.8	19.5	22.4	1.9	27.2	27.0	27.6	27.4	27.3	26.8	
4200.00	21.3	-28.2	-10.1	-14.2	1.3	0.8	19.6	22.4	1.9	27.8	27.9	27.6	27.5	27.3	26.9	
4300.00	21.3	-28.2	-10.4	-14.6	1.3	0.8	19.4	22.4	1.8	27.7	27.6	27.7	27.7	27.3	27.1	
4400.00	21.4	-28.2	-10.9	-15.2	1.3	0.8	19.3	22.4	1.8	27.7	27.2	27.4	27.3	27.2	26.7	
4500.00	21.4	-28.2	-11.2	-15.8	1.3	0.8	19.1	22.4	1.9	27.6	27.4	27.3	27.2	27.0	26.5	
4600.00	21.5	-28.3	-11.8	-16.5	1.3	0.8	18.8	22.3	1.9	27.0	27.4	27.2	27.0	26.8	26.3	
4700.00	21.5	-28.4	-12.3	-17.3	1.3	0.8	19.0	22.2	1.9	26.8	27.1	26.9	26.7	26.6	26.0	
4800.00	21.6	-28.5	-12.7	-17.6	1.3	0.8	19.2	22.1	1.9	28.1	27.0	27.4	27.3	27.0	26.7	
4900.00	21.6	-28.5	-13.4	-18.2	1.3	0.8	19.1	21.1	1.9	26.7	27.0	26.9	26.7	26.4	25.8	
5000.00	21.7	-28.5	-13.8	-19.1	1.3	0.8	19.2	22.0	1.9	26.8	26.6	26.3	26.2	26.1	25.4	
5100.00	21.8	-28.6	-14.1	-19.2	1.3	0.8	19.5	22.0	1.9	26.2	27.3	26.3	26.2	26.1	25.7	
5200.00	21.7	-28.7	-14.7	-19.7	1.4	0.8	19.6	21.9	1.9	26.6	26.8	26.6	26.5	26.4	26.1	
5300.00	21.8	-28.8	-14.5	-19.7	1.4	0.8	19.2	22.0	1.9	26.7	27.1	26.3	26.2	26.0	25.8	
5400.00	21.8	-29.0	-14.4	-19.3	1.4	0.8	18.6	21.9	1.9	26.8	26.6	26.4	26.2	26.0	25.6	
5500.00	21.8	-28.9	-14.5	-19.9	1.4	0.8	18.1	21.6	1.9	25.5	26.6	25.4	25.2	24.9	24.6	
5600.00	21.9	-29.1	-13.4	-19.0	1.4	0.9	17.5	21.2	1.9	26.1	26.2	25.6	25.3	24.9	24.5	
5700.00	21.7	-29.4	-12.9	-18.2	1.4	0.9	17.4	20.9	1.9	25.5	26.2	24.9	24.6	24.3	23.9	
5800.00	21.7	-29.3	-12.4	-18.2	1.4	0.9	17.5	20.5	1.9	25.1	25.4	24.9	24.6	24.2	23.8	
5900.00	21.7	-29.7	-11.0	-16.7	1.4	0.9	17.6	20.2	1.9	25.6	25.1	24.9	24.7	24.4	23.7	
6000.00	21.5	-29.8	-10.8	-16.3	1.5	0.9	17.6	19.7	1.9	24.7	25.0	24.6	24.4	24.0	23.6	
6100.00	21.6	-29.9	-9.8	-15.5	1.4	0.9	17.7	19.6	2.1	25.0	25.2	25.0	24.7	24.5	24.1	
6200.00	21.3	-30.5	-8.8	-14.1	1.5	1.0	17.8	19.3	2.1	25.0	24.3	24.6	24.4	24.2	23.8	
6300.00	21.2	-30.5	-8.5	-13.7	1.5	1.0	17.7	19.2	2.2	24.0	24.7	24.0	23.8	23.6	23.3	
6400.00	21.2	-30.8	-7.5	-12.6	1.5	1.0	17.7	19.1	2.2	24.7	24.8	24.5	24.3	24.1	23.7	
6500.00	20.9	-31.4	-6.9	-11.7	1.6	1.0	18.0	19.3	2.3	24.2	23.9	23.8	23.5	23.3	23.0	
6700.00	20.5	-32.3	-5.7	-10.2	1.6	1.0	17.9	19.1	2.3	24.2	23.6	23.9	23.6	23.4	23.0	
6800.00	20.1	-33.0	-5.3	-9.6	1.7	1.1	17.8	18.9	2.3	23.5	24.6	23.3	23.1	22.8	22.5	
6900.00	19.9	-33.3	-4													

TEST CONDITIONS: $V_{DD} = +5.0$ V, $V_{EN} = +5.0$ V, $I_{DD} = 75$ mA, $I_{EN} = 2.15$ mA @ Temperature = + 85°C

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	40.1	40.1	40.0	39.9	39.7	39.4	39.2
1000.0	39.3	39.3	39.2	39.0	38.8	38.6	38.2
2000.0	38.6	38.3	38.1	38.0	37.7	37.4	37.0
4000.0	44.3	44.2	43.6	43.3	43.0	42.8	42.6
6000.0	33.3	33.1	32.9	32.6	32.2	31.7	31.5
8000.0	37.5	37.1	36.7	36.7	37.4	39.2	41.8

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +5.0$ V, $V_{EN} = +5.0$ V, $I_{DD} = 80$ mA, $I_{EN} = 2.13$ mA @ Temperature = $+85^{\circ}\text{C}$

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure (dBm)										
5500.00	20.9	-29.8	-8.9	-8.3	1.4	0.8	17.7	21.5	2.0	26.8	26.7	26.7	26.5	26.3	25.9	25.9
5600.00	21.1	-29.8	-8.7	-8.4	1.4	0.8	17.3	21.2	2.0	26.0	25.8	25.5	25.1	24.8	24.4	24.4
5700.00	21.0	-29.8	-9.0	-8.6	1.4	0.8	17.1	21.0	2.0	25.9	25.3	25.8	25.6	25.4	25.1	24.5
5800.00	21.2	-29.9	-8.8	-8.6	1.4	0.8	17.1	20.7	2.0	25.9	26.1	25.7	25.5	25.4	25.1	24.6
5900.00	21.2	-30.0	-9.0	-8.9	1.4	0.8	17.1	20.3	2.0	25.2	25.9	25.4	25.2	25.0	24.7	24.1
6000.00	21.3	-30.0	-8.7	-8.9	1.4	0.8	17.1	19.8	2.0	24.3	24.6	24.2	24.0	23.6	23.2	22.9
6100.00	21.3	-30.0	-9.0	-9.2	1.4	0.8	17.7	19.9	2.0	25.4	25.6	25.1	24.9	24.8	24.5	24.2
6200.00	21.4	-30.2	-8.6	-9.2	1.4	0.8	18.0	19.9	2.0	24.7	25.2	24.6	24.5	24.3	24.1	23.9
6300.00	21.4	-30.2	-8.9	-9.5	1.5	0.8	18.3	20.0	2.0	25.6	25.6	25.5	25.6	25.4	25.3	25.3
6400.00	21.5	-30.4	-8.6	-9.4	1.5	0.8	18.5	20.1	2.0	25.4	25.4	25.5	25.4	25.3	25.2	25.2
6500.00	21.4	-30.5	-8.8	-9.9	1.5	0.8	18.5	20.0	2.0	25.9	25.7	25.5	25.5	25.5	25.5	25.5
6600.00	21.5	-30.8	-8.6	-9.9	1.5	0.9	18.8	20.1	2.0	25.6	25.9	25.7	25.6	25.7	25.6	25.6
6700.00	21.5	-30.8	-8.9	-10.3	1.5	0.9	18.7	20.1	2.1	25.4	25.6	25.6	25.5	25.6	25.6	25.6
6800.00	21.5	-31.0	-8.6	-10.4	1.6	0.9	18.9	20.1	2.1	25.7	26.2	25.9	25.9	25.9	26.0	26.0
6900.00	21.5	-31.1	-8.9	-10.9	1.6	0.9	19.0	20.2	2.1	25.8	25.9	26.1	26.1	26.2	26.4	26.4
7000.00	21.5	-31.5	-8.7	-11.0	1.6	0.9	19.0	20.2	2.2	25.9	25.7	25.7	25.7	25.8	26.0	26.0
7100.00	21.4	-31.6	-9.0	-11.6	1.7	0.9	19.0	20.1	2.2	26.5	26.3	26.1	26.0	26.0	26.2	26.3
7200.00	21.4	-32.0	-8.8	-11.7	1.7	0.9	19.1	20.2	2.2	26.1	25.9	26.0	26.0	26.1	26.2	26.4
7300.00	21.3	-32.3	-9.1	-12.5	1.8	1.0	19.0	20.1	2.3	25.8	25.5	25.5	25.6	25.9	26.1	26.1
7400.00	21.2	-32.7	-8.8	-12.7	1.9	1.0	19.1	20.1	2.3	25.8	25.2	25.6	25.6	25.7	25.9	26.2
7500.00	21.0	-32.9	-9.0	-13.7	2.0	1.0	18.7	19.8	2.4	25.8	26.1	25.6	25.7	25.9	26.1	26.5
7600.00	20.8	-33.8	-8.5	-13.9	2.2	1.0	18.8	19.7	2.5	26.1	25.3	25.9	25.8	25.9	26.0	26.3
7700.00	20.5	-33.9	-8.6	-15.1	2.3	1.0	18.8	19.7	2.6	24.9	24.5	24.5	24.7	24.7	25.0	25.2
7800.00	20.1	-35.0	-7.9	-15.1	2.6	1.1	18.5	19.4	2.7	25.5	25.9	25.4	25.5	25.7	25.9	26.3
7900.00	19.7	-35.2	-7.9	-16.1	2.8	1.1	18.3	19.2	2.8	25.4	25.7	25.6	25.5	25.7	26.0	26.3
8000.00	19.1	-36.7	-6.9	-15.2	3.3	1.2	18.0	18.8	2.9	24.6	24.5	25.0	24.9	25.2	25.6	25.9
8100.00	18.6	-36.9	-6.7	-15.1	3.5	1.2	17.9	18.7	3.0	24.8	25.0	24.9	25.0	25.2	25.5	25.8
8200.00	17.7	-38.6	-5.7	-13.3	4.2	1.2	17.6	18.3	3.2	24.2	24.4	24.4	24.6	24.6	25.0	24.8
8300.00	17.0	-39.0	-5.4	-12.6	4.6	1.2	17.3	18.0	3.4	24.8	25.0	24.6	24.8	25.0	25.3	25.2
8400.00	15.7	-40.6	-4.6	-10.7	5.6	1.2	16.9	17.6	3.6	25.3	25.5	25.1	25.1	25.4	25.6	25.4
8500.00	15.0	-41.6	-4.1	-9.8	6.3	1.3	16.3	17.0	3.8	23.8	23.9	24.1	24.2	24.4	24.3	23.0

FREQ (MHz)	IP-2 Output Pout = -2	IP-2 Output Pout = +0	IP-2 Output Pout = +2	IP-2 Output Pout = +4	IP-2 Output Pout = +6	IP-2 Output Pout = +8	IP-2 Output Pout = +10
	(dBm)						
5500.0	36.6	36.5	36.3	36.1	35.6	35.4	35.0
6000.0	34.3	34.2	33.9	33.6	33.2	32.8	32.4
7000.0	44.3	44.1	43.9	43.6	43.3	43.0	42.9
8000.0	52.4	52.2	51.9	51.6	51.2	50.9	50.9
8500.0	60.3	60.1	59.8	59.4	59.0	58.9	59.4



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions**Definitions:**

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +5.0$ V, $V_{EN} = 0$ V, $I_{DD} = 3$ mA, $I_{EN} = 0$ mA @ Temperature = $+85^{\circ}\text{C}$

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	K	Stability Measure	Noise Figure (dB)
200.00	-3.7	-3.9	-4.0	-9.1	1.1	0.9	3.5
300.00	-2.4	-2.4	-6.7	-11.9	1.0	0.7	2.3
400.00	-1.8	-1.8	-9.3	-14.0	1.0	0.6	2.1
500.00	-1.4	-1.5	-12.0	-15.7	1.0	0.5	2.1
600.00	-1.3	-1.4	-14.9	-16.9	1.0	0.5	1.4
700.00	-1.2	-1.3	-18.1	-17.8	1.0	0.4	1.3
800.00	-1.2	-1.3	-22.1	-18.0	1.0	0.4	1.6
900.00	-1.2	-1.3	-27.2	-17.7	1.0	0.4	1.5
1000.00	-1.1	-1.2	-30.9	-17.4	1.0	0.4	1.3
1100.00	-1.1	-1.2	-26.7	-17.0	1.0	0.4	1.5
1200.00	-1.2	-1.3	-23.0	-16.8	1.0	0.4	1.5
1300.00	-1.2	-1.3	-20.6	-16.3	1.0	0.4	1.3
1400.00	-1.2	-1.3	-18.8	-15.9	1.0	0.4	1.2
1500.00	-1.2	-1.4	-17.4	-15.6	1.0	0.4	1.6
1600.00	-1.3	-1.4	-16.3	-15.4	1.0	0.5	1.6
1700.00	-1.3	-1.5	-15.4	-15.3	1.0	0.5	1.5
1800.00	-1.3	-1.5	-14.7	-15.3	1.0	0.5	1.5
1900.00	-1.4	-1.6	-14.2	-15.1	1.0	0.5	1.5
2000.00	-1.4	-1.6	-13.8	-15.0	1.0	0.5	1.9
2100.00	-1.4	-1.7	-13.5	-15.2	1.0	0.5	1.7
2200.00	-1.5	-1.7	-13.3	-15.4	1.0	0.5	1.7
2300.00	-1.5	-1.7	-13.1	-15.6	1.0	0.5	1.9
2400.00	-1.5	-1.8	-13.1	-15.9	1.0	0.6	1.9
2500.00	-1.5	-1.8	-13.0	-16.3	1.0	0.6	2.0
2600.00	-1.6	-1.9	-13.1	-16.9	1.1	0.6	2.0
2700.00	-1.6	-2.0	-13.2	-17.6	1.1	0.6	2.1
2800.00	-1.6	-2.0	-13.3	-18.3	1.1	0.6	2.2
2900.00	-1.6	-2.0	-13.5	-19.1	1.1	0.6	2.2
3000.00	-1.6	-2.0	-13.6	-20.2	1.1	0.6	2.3
3100.00	-1.6	-2.0	-13.7	-21.7	1.1	0.6	2.5
3200.00	-1.7	-2.0	-13.8	-23.5	1.1	0.7	2.2
3300.00	-1.7	-2.0	-13.9	-25.1	1.1	0.7	2.3
3400.00	-1.7	-2.0	-14.0	-26.9	1.1	0.7	2.2
3500.00	-1.7	-2.0	-14.0	-28.0	1.1	0.7	2.2
3600.00	-1.7	-2.0	-13.9	-26.3	1.1	0.7	1.9
3700.00	-1.7	-2.1	-13.8	-24.1	1.1	0.7	2.1
3800.00	-1.7	-2.1	-13.6	-22.0	1.1	0.7	2.3
3900.00	-1.7	-2.1	-13.4	-20.3	1.1	0.7	2.1
4000.00	-1.8	-2.1	-13.2	-18.8	1.1	0.6	1.9
4100.00	-1.8	-2.1	-12.9	-17.4	1.1	0.6	2.3
4200.00	-1.8	-2.1	-12.5	-16.3	1.1	0.6	2.0
4300.00	-1.8	-2.2	-12.3	-15.5	1.1	0.6	2.0
4400.00	-1.8	-2.2	-12.1	-14.8	1.1	0.6	1.8
4500.00	-1.9	-2.2	-11.8	-14.1	1.1	0.6	2.1
4600.00	-1.9	-2.3	-11.6	-13.5	1.1	0.6	2.1
4700.00	-1.9	-2.3	-11.4	-13.0	1.1	0.6	2.3
4800.00	-1.9	-2.3	-11.3	-12.8	1.1	0.6	2.0
4900.00	-1.9	-2.4	-11.2	-12.5	1.1	0.6	1.5
5000.00	-1.9	-2.4	-11.1	-12.1	1.1	0.6	1.4
5100.00	-1.9	-2.4	-11.0	-11.9	1.1	0.6	1.9
5200.00	-1.9	-2.4	-11.0	-11.8	1.1	0.6	2.0
5300.00	-1.9	-2.4	-11.0	-11.7	1.1	0.6	1.8
5400.00	-1.9	-2.5	-11.0	-11.6	1.1	0.6	2.0
5500.00	-1.9	-2.5	-11.0	-11.5	1.1	0.6	1.9
5600.00	-1.9	-2.4	-11.2	-11.6	1.1	0.6	1.8
5700.00	-1.9	-2.5	-11.3	-11.6	1.1	0.6	1.7
5800.00	-1.8	-2.4	-11.5	-11.6	1.1	0.6	1.6
5900.00	-1.8	-2.4	-11.8	-11.8	1.1	0.6	1.5
6000.00	-1.8	-2.4	-11.9	-11.8	1.1	0.6	1.3
6100.00	-1.7	-2.4	-12.3	-11.9	1.1	0.6	1.9
6200.00	-1.7	-2.4	-12.7	-12.2	1.1	0.6	1.4
6300.00	-1.7	-2.4	-12.9	-12.3	1.1	0.6	1.9
6400.00	-1.7	-2.4	-13.3	-12.6	1.1	0.6	1.8
6500.00	-1.7	-2.4	-13.6	-12.7	1.1	0.6	1.3
6600.00	-1.6	-2.3	-13.8	-12.7	1.1	0.6	1.9
6700.00	-1.6	-2.3	-14.3	-13.1	1.1	0.6	1.8
6800.00	-1.7	-2.4	-14.6	-13.2	1.1	0.6	2.2
6900.00	-1.6	-2.3	-14.6	-13.2	1.1	0.6	1.6
7000.00	-1.6	-2.4	-14.9	-13.4	1.1	0.6	1.5
7100.00	-1.7	-2.4	-14.8	-13.3	1.1	0.6	1.6
7200.00	-1.7	-2.4	-14.7	-13.3	1.1	0.6	1.8
7300.00	-1.7	-2.5	-14.5	-13.2	1.1	0.6	1.8
7400.00	-1.8	-2.6	-13.9	-12.8	1.1	0.6	1.7
7500.00	-1.9	-2.6	-13.4	-12.6	1.1	0.6	1.7
7600.00	-2.0	-2.7	-13.0	-12.3	1.1	0.6	1.7
7700.00	-2.1	-2.8	-12.2	-11.6	1.2	0.7	1.5
7800.00	-2.2	-2.9	-11.7	-11.2	1.2	0.7	1.8
7900.00	-2.4	-3.1	-11.1	-10.6	1.2	0.7	1.8
8000.00	-2.4	-3.1	-10.1	-9.9	1.2	0.7	2.3

TEST CONDITIONS: $V_{DD} = +5.0$ V, $V_{EN} = 0$ V, $I_{DD} = 3$ mA, $I_{EN} = 0$ mA @ Temperature = +85°C

FREQ (MHz)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
400.0	31.8	30.4	28.2	25.0	20.1	15.6	14.9
1000.0	33.8	32.5	30.3	26.9	21.2	15.0	15.8
2000.0	35.7	35.0	33.5	31.1	27.3	20.3	16.6
4000.0	36.8	36.4	35.5	34.0	31.5	27.5	21.4
6000.0	37.3	37.2	36.1	34.2	31.0	25.8	18.1
8000.0	38.8	38.2	36.9	34.8	31.8	26.6	18.2

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	71.9	71.2	69.8	67.1	59.9	47.8	46.3
1000.0	71.3	71.4	71.3	70.0	61.9	52.0	52.4
2000.0	71.6	71.3	71.1	70.4	68.4	60.4	52.5
4000.0	72.4	72.5	72.5	72.8	73.2	73.2	58.5
6000.0	72.7	72.5	72.1	71.8	70.9	67.3	57.9
8000.0	83.6	83.5	83.4	83.1	82.4	80.2	70.5

FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
400.0	12.2	9.4
1000.0	11.8	9.7
2000.0	13.7	11.2
4000.0	15.7	13.2
6000.0	16.3	13.3
8000.0	16.2	12.7



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IF/RF MICROWAVE COMPONENTS

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +5.0 V, V_{EN} = 0 V, I_{DD} = 3 mA, I_{EN} = 0 mA @ Temperature = +85°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)	FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
					K	Measure				
5500.00	-1.7	-2.4	-20.0	-17.4	1.1	0.7	3.1	5500.0	15.4	12.2
5600.00	-1.7	-2.4	-20.5	-17.2	1.1	0.7	2.7	6000.0	15.8	12.9
5700.00	-1.7	-2.4	-20.4	-17.0	1.1	0.7	2.7	7000.0	17.4	13.8
5800.00	-1.7	-2.4	-19.9	-16.4	1.1	0.7	2.7	8000.0	18.0	12.7
5900.00	-1.7	-2.4	-19.0	-15.8	1.1	0.7	2.6	8500.0	16.9	11.4
6000.00	-1.7	-2.5	-18.2	-15.2	1.1	0.7	2.6			
6100.00	-1.7	-2.5	-17.1	-14.5	1.1	0.7	2.7			
6200.00	-1.7	-2.5	-16.3	-13.9	1.1	0.7	3.0			
6300.00	-1.7	-2.6	-15.2	-13.2	1.1	0.7	2.8			
6400.00	-1.8	-2.6	-14.5	-12.7	1.1	0.7	2.9			
6500.00	-1.8	-2.7	-13.7	-12.2	1.1	0.7	2.9			
6600.00	-1.8	-2.7	-13.0	-11.6	1.1	0.7	2.6			
6700.00	-1.9	-2.8	-12.3	-11.1	1.1	0.7	3.0			
6800.00	-2.0	-2.8	-11.7	-10.7	1.1	0.7	2.8			
6900.00	-2.0	-2.9	-11.0	-10.1	1.1	0.7	3.2			
7000.00	-2.1	-3.0	-10.5	-9.7	1.1	0.7	3.0			
7100.00	-2.2	-3.1	-9.8	-9.2	1.1	0.6	3.0			
7200.00	-2.3	-3.2	-9.3	-8.8	1.1	0.6	3.2			
7300.00	-2.4	-3.3	-8.8	-8.4	1.1	0.6	3.2			
7400.00	-2.6	-3.4	-8.3	-8.0	1.1	0.6	3.3			
7500.00	-2.7	-3.6	-7.8	-7.6	1.2	0.6	3.3			
7600.00	-2.9	-3.7	-7.4	-7.2	1.2	0.6	3.2			
7700.00	-3.1	-3.9	-6.9	-6.8	1.2	0.6	3.3			
7800.00	-3.2	-4.1	-6.5	-6.5	1.2	0.6	3.3			
7900.00	-3.4	-4.3	-6.1	-6.1	1.2	0.6	3.8			
8000.00	-3.6	-4.4	-5.8	-5.8	1.2	0.6	3.8			
8100.00	-3.8	-4.6	-5.3	-5.4	1.2	0.6	4.3			
8200.00	-4.1	-4.8	-5.1	-5.3	1.2	0.6	4.1			
8300.00	-4.3	-5.0	-4.7	-4.9	1.2	0.6	3.9			
8400.00	-4.5	-5.2	-4.5	-4.7	1.2	0.6	3.8			
8500.00	-4.7	-5.4	-4.2	-4.4	1.2	0.6	3.6			

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
5500.0	69.8	69.8	69.6	69.4	68.5	65.2	59.6	38.8	38.2	37.6	36.9	34.5	30.9	24.9
6000.0	75.9	75.7	75.5	75.2	74.9	73.8	68.8	38.7	39.0	38.4	36.4	33.5	28.7	19.3
7000.0	86.5	86.4	86.3	86.0	85.4	83.8	78.0	39.5	39.0	38.7	35.6	32.9	29.0	23.0
8000.0	83.8	83.8	83.7	83.5	83.1	81.9	76.2	38.6	38.9	38.0	37.6	35.6	32.3	26.5
8500.0	92.2	92.3	92.3	92.3	92.1	89.9	94.4	38.7	38.0	36.3	33.5	29.1	20.7	16.0



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IF/RF MICROWAVE COMPONENTS



MMIC Amplifier

TSY-83LN+

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +5.25\text{ V}$, $V_{EN} = +5.25\text{ V}$, $I_{DD} = 81\text{ mA}$, $I_{EN} = 2.26\text{ mA}$ @ Temperature = + 85°C

FREQ (GHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure										
200.00	14.7	-32.9	-1.9	-4.7	1.5	1.0	19.5	20.9	5.3	29.5	31.6	31.7	31.4	31.2	31.1	30.7
300.00	19.5	-28.1	-5.8	-8.9	1.2	0.8	19.9	21.2	2.9	30.6	32.2	32.3	32.0	31.8	31.6	31.8
400.00	20.9	-26.6	-11.7	-15.2	1.2	0.7	20.4	21.6	2.2	30.9	32.6	33.5	33.3	33.3	33.0	33.0
500.00	21.3	-26.2	-17.8	-19.4	1.2	0.7	20.8	21.7	1.9	31.1	32.1	32.5	33.9	33.5	33.2	33.1
600.00	21.4	-26.2	-19.5	-18.8	1.1	0.7	21.1	21.9	1.7	30.9	34.6	34.6	34.5	34.4	34.2	34.0
700.00	21.4	-26.1	-18.1	-17.7	1.1	0.6	21.2	22.1	1.6	32.4	34.5	33.9	34.4	33.6	33.7	33.4
800.00	21.4	-26.1	-17.0	-17.2	1.1	0.7	21.4	22.2	1.6	34.4	33.3	34.0	33.5	33.3	33.1	33.0
900.00	21.4	-26.2	-16.4	-17.1	1.1	0.7	21.5	22.3	1.6	33.4	34.9	33.7	33.5	33.5	33.2	33.2
1000.00	21.4	-26.2	-16.0	-17.4	1.1	0.7	21.5	22.3	1.6	32.9	34.1	33.8	34.0	33.9	34.0	33.7
1100.00	21.4	-26.3	-15.9	-17.8	1.1	0.7	21.4	22.3	1.6	33.5	34.0	33.5	33.5	33.6	33.5	33.2
1200.00	21.4	-26.3	-15.9	-18.6	1.1	0.7	21.5	22.5	1.6	32.7	33.4	33.6	33.2	33.1	33.1	32.9
1300.00	21.4	-26.3	-15.9	-19.6	1.2	0.7	21.6	22.5	1.5	32.9	32.9	32.5	32.5	32.8	32.5	32.4
1400.00	21.5	-26.4	-16.1	-20.9	1.2	0.7	21.5	22.4	1.6	31.5	31.7	33.5	33.3	33.2	33.1	32.9
1500.00	21.4	-26.4	-16.0	-22.7	1.2	0.7	21.4	22.5	1.6	30.9	31.7	31.6	32.0	31.8	31.7	31.5
1600.00	21.4	-26.5	-15.8	-24.8	1.2	0.7	21.4	22.6	1.6	31.5	32.4	32.6	32.8	32.4	32.3	32.1
1700.00	21.4	-26.6	-15.6	-26.6	1.2	0.7	21.5	22.7	1.7	31.2	33.0	32.0	31.8	31.7	31.5	31.5
1800.00	21.5	-26.6	-15.3	-28.7	1.2	0.7	21.3	22.6	1.7	32.9	32.5	32.3	31.8	31.6	31.7	31.4
1900.00	21.5	-26.7	-14.9	-28.2	1.2	0.7	21.3	22.6	1.8	31.7	31.4	30.6	30.9	30.8	30.7	30.4
2000.00	21.5	-26.7	-14.5	-25.7	1.2	0.7	21.0	22.5	1.8	32.5	32.3	31.3	31.7	31.3	31.2	30.9
2100.00	21.5	-26.8	-13.9	-23.4	1.2	0.7	21.2	22.7	1.8	31.7	30.5	31.1	31.2	31.0	30.9	30.7
2200.00	21.4	-26.9	-13.4	-21.5	1.2	0.8	21.1	22.6	1.8	31.6	31.4	31.5	31.5	31.4	31.2	31.2
2300.00	21.4	-27.0	-12.8	-19.7	1.2	0.8	21.0	22.7	1.8	31.5	31.7	31.2	31.1	30.9	30.9	30.7
2400.00	21.4	-27.1	-12.3	-18.3	1.2	0.8	20.8	22.8	1.8	29.3	30.5	29.5	29.8	29.6	29.5	29.3
2500.00	21.4	-27.2	-11.9	-17.2	1.2	0.8	20.6	22.8	1.9	29.5	30.0	29.7	29.8	29.7	29.5	29.2
2600.00	21.3	-27.4	-11.4	-16.2	1.2	0.8	20.4	22.7	1.9	29.6	29.8	29.9	29.5	29.4	29.3	28.9
2700.00	21.3	-27.4	-11.0	-15.5	1.2	0.8	20.1	22.4	2.0	30.3	30.0	29.9	29.8	29.7	29.4	29.4
2800.00	21.3	-27.6	-10.7	-14.8	1.2	0.8	20.0	22.3	2.0	29.5	29.6	29.5	29.4	29.4	28.9	28.9
2900.00	21.2	-27.7	-10.3	-14.1	1.2	0.8	19.7	22.1	2.0	28.8	28.7	28.5	28.4	28.4	28.2	27.8
3000.00	21.2	-27.7	-10.0	-13.6	1.2	0.8	19.9	22.3	2.0	28.6	29.4	28.5	28.5	28.4	28.2	27.9
3100.00	21.2	-27.8	-9.7	-13.2	1.2	0.8	19.8	22.5	2.0	28.6	28.3	28.2	28.0	27.9	27.7	27.4
3200.00	21.2	-27.9	-9.5	-12.9	1.3	0.8	19.8	22.5	2.1	29.0	28.9	28.7	28.5	28.3	28.2	27.8
3300.00	21.2	-27.9	-9.4	-12.7	1.2	0.8	19.6	22.3	2.0	28.6	28.7	28.5	28.4	28.2	28.0	27.7
3400.00	21.2	-28.0	-9.2	-12.5	1.2	0.8	19.5	22.1	2.0	29.9	28.4	29.1	28.8	28.6	28.5	28.2
3500.00	21.2	-28.0	-9.2	-12.5	1.3	0.8	19.6	22.3	2.0	28.9	28.6	28.1	28.0	27.9	27.7	27.4
3600.00	21.2	-28.0	-9.2	-12.7	1.2	0.8	19.6	22.3	2.0	27.6	28.0	27.9	27.8	27.6	27.3	27.3
3700.00	21.2	-28.1	-9.2	-12.8	1.3	0.8	19.8	22.5	2.0	28.5	28.7	29.3	28.9	29.0	28.8	28.6
3800.00	21.3	-28.1	-9.4	-13.0	1.3	0.8	19.9	22.5	2.0	27.1	28.8	28.0	28.0	27.9	27.7	27.5
3900.00	21.3	-28.1	-9.5	-13.3	1.3	0.8	20.0	22.6	1.9	27.5	28.7	28.2	28.3	28.2	28.0	27.7
4000.00	21.4	-28.2	-9.7	-13.6	1.3	0.8	19.9	22.7	2.0	27.9	28.1	28.6	28.6	28.5	28.4	28.2
4100.00	21.4	-28.2	-10.0	-14.1	1.3	0.8	20.0	22.8	1.9	28.1	28.3	28.2	28.1	28.0	27.8	27.8
4200.00	21.5	-28.2	-10.3	-14.7	1.3	0.8	20.1	22.7	1.8	28.4	28.2	28.2	28.2	28.0	27.8	27.7
4300.00	21.5	-28.3	-10.6	-15.1	1.3	0.8	19.9	22.7	1.9	27.8	28.0	28.3	28.4	28.3	28.2	27.9
4400.00	21.6	-28.4	-11.1	-15.7	1.3	0.8	19.8	22.7	1.8	28.5	27.9	28.0	28.0	27.9	27.8	27.5
4500.00	21.7	-28.3	-11.4	-16.4	1.3	0.8	19.6	22.6	1.8	27.8	27.7	27.7	28.0	27.8	27.7	27.4
4600.00	21.7	-28.4	-12.0	-17.1	1.3	0.8	19.3	22.5	1.9	27.3	27.7	27.8	27.8	27.6	27.5	27.1
4700.00	21.7	-28.4	-12.5	-17.9	1.3	0.8	19.4	22.5	1.9	27.5	27.3	27.7	27.5	27.4	27.2	26.9
4800.00	21.8	-28.5	-12.9	-18.3	1.3	0.8	19.7	22.4	1.9	27.9	28.0	27.9	28.0	27.8	27.5	27.5
4900.00	21.8	-28.6	-13.6	-19.0	1.3	0.8	19.5	22.4	1.9	27.3	27.7	27.3	27.3	27.2	27.1	26.7
5000.00	21.9	-28.6	-14.0	-20.0	1.3	0.8	19.6	22.3	1.9	26.9	27.2	26.8	27.0	26.9	26.7	26.3
5100.00	22.0	-28.7	-14.3	-20.2	1.3	0.8	20.0	22.3	1.9	26.5	28.1	26.9	26.9	26.8	26.5	26.5
5200.00	21.9	-28.8	-15.0	-20.7	1.4	0.8	20.0	22.3	1.9	26.6	27.4	27.0	27.1	27.1	27.1	26.9
5300.00	22.0	-28.8	-14.8	-20.7	1.3	0.8	19.7	22.2	1.9	26.7	27.6	27.0	26.9	26.8	26.6	26.4
5400.00	22.0	-29.1	-14.7	-20.3	1.4	0.8	19.1	22.1	1.9	27.0	27.4	26.9	26.8	26.7	26.4	26.4
5500.00	22.0	-28.9	-14.8	-20.9	1.4	0.8	18.6	21.8	1.9	26.5	27.6	26.3	26.2	26.0	25.8	25.4
5600.00	22.1	-29.2	-13.6	-19.9	1.4	0.8	18.0	21.4	1.9	26.7	26.6	26.4	26.2	26.1	25.8	25.3
5700.00	21.9	-29.5	-13.2	-19.0	1.4	0.9	17.9	21.0	1.9	25.7	26.6	25.5	25.3	25.1	24.8	24.2
5800.00	22.0	-29.4	-12.6	-19.0	1.4	0.9	18.0	20.7	2.0	25.8	25.9	25.3	25.2	25.0	24.7	24.1
5900.00	21.9	-29.7	-11.2	-17.3	1.4	0.9	18.0	20.4	2.0	26.1	25.6	25.6	25.4	25.2	24.9	24.4
6000.00	21.7	-29.8	-11.0	-16.9	1.4	0.9	18.0	19.9	1.9	25.2	25.6	25.2	25.0	24.8	24.5	23.9
6100.00	21.8	-30.0	-9.9	-16.0	1.4	0.9	18.1	19.8	2.1	25.8	25.6	25.6	25.4	25.2	24.9	24.5
6200.00	21.6	-30.6	-8.9	-14.4	1.5	0.9	18.2	19.6	2.1	25.6	25.0	25.2	25.1	24.9	24.6	24.2
6300.00	21.5	-30.5	-8.6	-14.1	1.5	1.0	18.1	19.5	2.2	24.7	25.2	24.6	24.5	24.3	24.1	

TEST CONDITIONS: $V_{DD} = +5.25$ V, $V_{EN} = +5.25$ V, $I_{DD} = 81$ mA, $I_{EN} = 2.26$ mA @ Temperature = + 85°C

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	41.7	41.5	41.5	41.4	41.3	41.1	40.7
1000.0	40.8	40.8	40.7	40.5	40.4	40.1	39.7
2000.0	39.9	39.6	39.5	39.3	39.0	38.7	38.3
4000.0	44.1	44.0	43.8	43.5	43.3	43.1	42.9
6000.0	33.7	33.6	33.3	33.0	32.6	32.2	31.9
8000.0	38.1	37.6	37.3	37.2	37.8	39.4	41.9

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +5.25 V, V_{EN} = +5.25 V, I_{DD} = 86 mA, I_{EN} = 2.24 mA @ Temperature = +85°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure (dBm)										
5500.00	21.1	-29.8	-9.0	-8.5	1.4	0.8	18.3	21.6	2.0	26.8	27.4	27.3	27.2	27.0	26.7	
5600.00	21.3	-29.9	-8.8	-8.6	1.4	0.8	17.9	21.4	2.0	25.9	26.3	26.0	25.8	25.6	25.2	
5700.00	21.2	-29.8	-9.1	-8.8	1.4	0.8	17.7	21.1	2.0	26.4	26.3	26.1	26.0	25.8	25.4	
5800.00	21.4	-30.0	-8.8	-8.8	1.4	0.8	17.7	20.9	2.0	26.4	26.1	26.3	26.1	26.0	25.8	
5900.00	21.4	-30.0	-9.1	-9.0	1.4	0.8	17.6	20.4	2.0	25.9	25.6	25.9	25.8	25.6	25.4	
6000.00	21.5	-30.1	-8.8	-9.0	1.4	0.8	17.6	20.0	2.0	24.5	24.7	24.7	24.5	24.3	23.5	
6100.00	21.5	-30.0	-9.0	-9.3	1.4	0.8	18.2	20.2	2.0	25.9	26.0	25.5	25.4	25.3	24.9	
6200.00	21.6	-30.2	-8.7	-9.3	1.4	0.8	18.4	20.1	2.0	25.3	25.2	25.1	25.0	24.9	24.6	
6300.00	21.6	-30.2	-8.9	-9.6	1.4	0.8	18.7	20.3	2.0	26.3	26.0	26.1	26.0	25.9	25.9	
6400.00	21.7	-30.5	-8.6	-9.5	1.5	0.8	18.9	20.4	2.0	25.5	26.2	25.7	25.8	25.9	25.9	
6500.00	21.6	-30.5	-8.8	-9.9	1.5	0.8	18.9	20.3	2.1	25.8	26.1	25.9	25.9	26.0	26.1	
6600.00	21.7	-30.8	-8.6	-9.9	1.5	0.8	19.2	20.5	2.0	25.8	26.2	26.0	26.0	26.1	26.2	
6700.00	21.7	-30.9	-8.9	-10.3	1.5	0.9	19.1	20.4	2.1	26.1	25.7	25.8	25.9	26.0	26.1	
6800.00	21.7	-31.2	-8.6	-10.4	1.6	0.9	19.3	20.5	2.1	25.9	26.7	26.1	26.2	26.3	26.6	
6900.00	21.7	-31.2	-8.9	-10.8	1.6	0.9	19.3	20.5	2.1	26.4	26.3	26.4	26.3	26.5	26.9	
7000.00	21.7	-31.6	-8.7	-10.9	1.6	0.9	19.4	20.5	2.2	25.8	26.1	25.8	25.9	26.1	26.2	
7100.00	21.6	-31.7	-9.0	-11.5	1.7	0.9	19.4	20.5	2.2	26.0	25.8	26.3	26.3	26.4	26.6	
7200.00	21.6	-32.2	-8.7	-11.6	1.7	0.9	19.5	20.5	2.2	25.6	26.3	26.2	26.2	26.4	26.9	
7300.00	21.5	-32.4	-9.0	-12.4	1.8	1.0	19.3	20.4	2.3	25.6	25.5	25.6	25.8	26.0	26.5	
7400.00	21.4	-33.0	-8.7	-12.6	1.9	1.0	19.4	20.4	2.3	25.7	25.3	25.8	25.8	26.0	26.3	
7500.00	21.2	-33.1	-9.0	-13.6	2.0	1.0	19.1	20.1	2.4	25.8	26.0	25.8	25.9	26.1	26.5	
7600.00	21.0	-34.0	-8.5	-13.7	2.2	1.0	19.1	20.0	2.5	26.1	26.0	25.8	26.0	26.2	26.7	
7700.00	20.7	-34.1	-8.6	-15.0	2.3	1.0	19.1	19.9	2.6	24.7	24.5	24.8	24.9	25.1	25.3	
7800.00	20.3	-35.2	-7.9	-15.0	2.6	1.1	18.8	19.7	2.6	25.4	25.5	25.6	25.7	25.9	26.2	
7900.00	19.9	-35.5	-7.8	-16.1	2.8	1.1	18.6	19.5	2.8	25.6	25.1	25.6	25.7	26.0	26.3	
8000.00	19.3	-37.0	-6.9	-15.3	3.3	1.2	18.4	19.1	2.9	25.2	24.5	24.8	25.1	25.4	25.9	
8100.00	18.7	-37.2	-6.6	-15.4	3.5	1.2	18.2	18.9	3.0	25.3	25.2	25.0	25.1	25.4	25.9	
8200.00	17.8	-39.1	-5.6	-13.6	4.4	1.2	17.9	18.5	3.2	24.5	24.3	24.6	24.9	25.4	25.3	
8300.00	17.2	-39.3	-5.3	-12.8	4.6	1.2	17.6	18.2	3.4	24.7	24.7	24.9	24.9	25.2	25.7	
8400.00	15.9	-41.5	-4.5	-10.8	6.1	1.3	17.1	17.7	3.6	25.3	25.3	25.2	25.4	25.7	26.1	
8500.00	15.1	-41.8	-4.1	-9.9	6.4	1.3	16.6	17.1	3.8	24.1	23.8	24.0	24.4	24.8	24.9	

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)
5500.0	37.1	37.1	36.9	36.6	36.4	36.0	35.7
6000.0	34.6	34.5	34.2	34.0	33.6	33.2	32.8
7000.0	44.5	44.3	44.1	43.8	43.5	43.2	43.1
8000.0	52.6	52.4	52.2	51.8	51.5	51.2	51.2
8500.0	60.5	60.3	60.0	59.6	59.3	59.2	59.6



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +5.25$ V, $V_{EN} = 0$ V, $I_{DD} = 3$ mA, $I_{EN} = 0$ mA @ Temperature = +85°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)
					K	Measure	
200.00	-3.8	-3.9	-4.0	-9.1	1.1	0.9	3.5
300.00	-2.4	-2.5	-6.7	-11.9	1.0	0.7	2.4
400.00	-1.8	-1.8	-9.3	-14.0	1.0	0.6	2.1
500.00	-1.5	-1.5	-12.0	-15.7	1.0	0.5	2.0
600.00	-1.3	-1.4	-14.9	-16.9	1.0	0.5	1.4
700.00	-1.2	-1.3	-18.1	-17.8	1.0	0.5	1.4
800.00	-1.2	-1.3	-22.1	-17.9	1.0	0.4	1.5
900.00	-1.2	-1.3	-27.1	-17.7	1.0	0.4	1.3
1000.00	-1.1	-1.3	-30.5	-17.3	1.0	0.4	1.1
1100.00	-1.1	-1.3	-26.6	-17.0	1.0	0.4	1.4
1200.00	-1.2	-1.3	-23.0	-16.7	1.0	0.4	1.3
1300.00	-1.2	-1.3	-20.6	-16.3	1.0	0.4	1.2
1400.00	-1.2	-1.3	-18.7	-15.9	1.0	0.4	1.2
1500.00	-1.2	-1.4	-17.4	-15.5	1.0	0.5	1.5
1600.00	-1.3	-1.4	-16.2	-15.4	1.0	0.5	1.7
1700.00	-1.3	-1.5	-15.4	-15.3	1.0	0.5	1.4
1800.00	-1.3	-1.5	-14.7	-15.2	1.0	0.5	1.6
1900.00	-1.4	-1.6	-14.2	-15.1	1.0	0.5	1.8
2000.00	-1.4	-1.6	-13.8	-15.0	1.0	0.5	1.7
2100.00	-1.4	-1.7	-13.5	-15.2	1.0	0.5	1.6
2200.00	-1.5	-1.7	-13.3	-15.4	1.0	0.5	1.8
2300.00	-1.5	-1.7	-13.1	-15.6	1.0	0.6	2.1
2400.00	-1.5	-1.8	-13.0	-15.9	1.0	0.6	2.1
2500.00	-1.6	-1.9	-13.0	-16.3	1.0	0.6	2.0
2600.00	-1.6	-1.9	-13.1	-16.9	1.1	0.6	2.0
2700.00	-1.6	-2.0	-13.2	-17.6	1.1	0.6	2.1
2800.00	-1.6	-2.0	-13.3	-18.3	1.1	0.6	2.2
2900.00	-1.6	-2.0	-13.4	-19.1	1.1	0.6	2.2
3000.00	-1.6	-2.1	-13.6	-20.2	1.1	0.6	2.4
3100.00	-1.7	-2.1	-13.7	-21.7	1.1	0.7	2.4
3200.00	-1.7	-2.1	-13.8	-23.4	1.1	0.7	2.4
3300.00	-1.7	-2.0	-13.9	-25.0	1.1	0.7	2.4
3400.00	-1.7	-2.1	-13.9	-26.7	1.1	0.7	2.5
3500.00	-1.7	-2.1	-13.9	-27.6	1.1	0.7	2.3
3600.00	-1.7	-2.1	-13.8	-26.1	1.1	0.7	2.6
3700.00	-1.7	-2.1	-13.8	-23.9	1.1	0.7	2.3
3800.00	-1.7	-2.1	-13.6	-21.9	1.1	0.7	2.4
3900.00	-1.8	-2.1	-13.4	-20.3	1.1	0.7	2.2
4000.00	-1.8	-2.1	-13.1	-18.7	1.1	0.7	2.1
4100.00	-1.8	-2.2	-12.8	-17.4	1.1	0.7	2.2
4200.00	-1.8	-2.2	-12.5	-16.3	1.1	0.6	1.8
4300.00	-1.8	-2.2	-12.3	-15.5	1.1	0.6	2.0
4400.00	-1.9	-2.2	-12.0	-14.7	1.1	0.6	1.7
4500.00	-1.9	-2.3	-11.8	-14.1	1.1	0.6	2.1
4600.00	-1.9	-2.3	-11.6	-13.5	1.1	0.6	1.8
4700.00	-1.9	-2.3	-11.4	-13.0	1.1	0.6	2.6
4800.00	-1.9	-2.3	-11.3	-12.8	1.1	0.6	2.0
4900.00	-1.9	-2.4	-11.2	-12.5	1.1	0.6	2.0
5000.00	-1.9	-2.4	-11.0	-12.1	1.1	0.6	2.0
5100.00	-1.9	-2.4	-11.0	-11.9	1.1	0.6	2.1
5200.00	-1.9	-2.4	-10.9	-11.8	1.1	0.6	2.0
5300.00	-1.9	-2.4	-11.0	-11.7	1.1	0.6	1.8
5400.00	-1.9	-2.5	-11.0	-11.6	1.1	0.6	1.8
5500.00	-1.9	-2.5	-11.0	-11.4	1.1	0.6	2.1
5600.00	-1.9	-2.4	-11.2	-11.5	1.1	0.6	1.8
5700.00	-1.9	-2.5	-11.3	-11.6	1.1	0.6	1.7
5800.00	-1.8	-2.4	-11.5	-11.6	1.1	0.6	1.4
5900.00	-1.8	-2.4	-11.8	-11.8	1.1	0.6	1.2
6000.00	-1.8	-2.4	-11.9	-11.7	1.1	0.6	2.1
6100.00	-1.7	-2.4	-12.3	-11.9	1.1	0.6	1.8
6200.00	-1.8	-2.4	-12.7	-12.2	1.1	0.6	1.4
6300.00	-1.7	-2.4	-12.9	-12.3	1.1	0.6	2.1
6400.00	-1.7	-2.4	-13.3	-12.6	1.1	0.6	2.1
6500.00	-1.7	-2.4	-13.6	-12.6	1.1	0.6	1.3
6600.00	-1.7	-2.4	-13.8	-12.7	1.1	0.6	1.5
6700.00	-1.6	-2.3	-14.3	-13.1	1.1	0.6	2.1
6800.00	-1.7	-2.4	-14.6	-13.2	1.1	0.6	1.6
6900.00	-1.6	-2.4	-14.7	-13.2	1.1	0.6	1.7
7000.00	-1.7	-2.4	-14.9	-13.3	1.1	0.6	1.6
7100.00	-1.7	-2.4	-14.8	-13.3	1.1	0.6	2.0
7200.00	-1.7	-2.4	-14.6	-13.3	1.1	0.6	1.4
7300.00	-1.8	-2.5	-14.4	-13.2	1.1	0.6	1.9
7400.00	-1.8	-2.6	-13.9	-12.8	1.1	0.6	1.6
7500.00	-1.9	-2.6	-13.4	-12.6	1.1	0.6	1.6
7600.00	-2.0	-2.7	-13.0	-12.3	1.2	0.7	1.6
7700.00	-2.1	-2.8	-12.2	-11.6	1.2	0.7	1.4
7800.00	-2.2	-2.9	-11.6	-11.2	1.2	0.7	2.0
7900.00	-2.4	-3.1	-11.0	-10.6	1.2	0.7	2.2
8000.00	-2.4	-3.1	-10.1	-9.9	1.2	0.7	1.9

TEST CONDITIONS: $V_{DD} = +5.25$ V, $V_{EN} = 0$ V, $I_{DD} = 3$ mA, $I_{EN} = 0$ mA @ Temperature = $+85^\circ\text{C}$

FREQ (MHz)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
400.0	31.3	30.0	27.8	24.5	19.7	15.4	14.7
1000.0	33.2	32.0	29.8	26.4	20.6	14.8	15.8
2000.0	34.9	34.3	32.9	30.5	26.7	19.8	16.5
4000.0	35.6	35.3	34.6	33.3	30.8	26.8	20.8
6000.0	36.6	36.1	35.3	33.5	30.4	25.0	17.8
8000.0	37.2	37.0	35.8	34.0	31.1	25.8	17.8

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	71.4	70.7	69.3	66.4	58.8	47.3	46.3
1000.0	71.2	71.3	71.1	69.4	60.8	52.2	52.2
2000.0	71.3	71.0	70.7	70.0	67.7	59.6	52.3
4000.0	72.4	72.4	72.4	72.7	73.3	73.2	57.6
6000.0	72.4	72.3	72.1	71.7	70.8	67.0	57.6
8000.0	83.4	83.3	83.3	83.0	82.2	79.7	69.6

FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
400.0	12.2	9.3
1000.0	11.8	9.6
2000.0	13.5	11.1
4000.0	15.7	13.1
6000.0	16.1	13.1
8000.0	16.0	12.6



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IF/RF MICROWAVE COMPONENTS

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +5.25$ V, $V_{EN} = 0$ V, $I_{DD} = 3$ mA, $I_{EN} = 0$ mA @ Temperature = +85°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)	FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
					K	Measure				
5500.00	-1.7	-2.4	-20.0	-17.4	1.1	0.7	2.9	5500.0	15.1	12.1
5600.00	-1.7	-2.4	-20.5	-17.2	1.1	0.7	2.6	6000.0	15.6	12.7
5700.00	-1.7	-2.4	-20.3	-17.0	1.1	0.7	2.6	7000.0	17.2	13.6
5800.00	-1.7	-2.4	-19.8	-16.3	1.1	0.7	2.7	8000.0	17.8	12.6
5900.00	-1.7	-2.4	-18.9	-15.8	1.1	0.7	2.7	8500.0	16.7	11.3
6000.00	-1.7	-2.5	-18.2	-15.2	1.1	0.7	2.4			
6100.00	-1.7	-2.5	-17.1	-14.5	1.1	0.7	2.8			
6200.00	-1.7	-2.5	-16.3	-13.9	1.1	0.7	2.7			
6300.00	-1.7	-2.6	-15.2	-13.2	1.1	0.7	3.0			
6400.00	-1.8	-2.6	-14.5	-12.7	1.1	0.7	2.5			
6500.00	-1.8	-2.7	-13.7	-12.1	1.1	0.7	2.8			
6600.00	-1.8	-2.7	-13.0	-11.6	1.1	0.7	2.7			
6700.00	-1.9	-2.8	-12.3	-11.1	1.1	0.7	3.0			
6800.00	-2.0	-2.8	-11.6	-10.6	1.1	0.7	3.0			
6900.00	-2.0	-2.9	-11.0	-10.1	1.1	0.7	2.9			
7000.00	-2.1	-3.0	-10.4	-9.7	1.1	0.7	3.1			
7100.00	-2.2	-3.1	-9.8	-9.2	1.1	0.6	3.0			
7200.00	-2.3	-3.2	-9.3	-8.8	1.1	0.6	3.2			
7300.00	-2.5	-3.3	-8.8	-8.4	1.1	0.6	3.1			
7400.00	-2.6	-3.4	-8.3	-8.0	1.1	0.6	3.1			
7500.00	-2.7	-3.6	-7.8	-7.6	1.2	0.6	3.4			
7600.00	-2.9	-3.7	-7.4	-7.2	1.2	0.6	3.4			
7700.00	-3.1	-3.9	-6.9	-6.8	1.2	0.6	3.4			
7800.00	-3.2	-4.1	-6.5	-6.5	1.2	0.6	3.5			
7900.00	-3.4	-4.3	-6.1	-6.1	1.2	0.6	3.8			
8000.00	-3.6	-4.4	-5.8	-5.8	1.2	0.6	4.0			
8100.00	-3.8	-4.6	-5.3	-5.4	1.2	0.6	4.1			
8200.00	-4.1	-4.8	-5.1	-5.2	1.2	0.6	4.0			
8300.00	-4.3	-5.0	-4.7	-4.9	1.2	0.6	3.6			
8400.00	-4.5	-5.2	-4.5	-4.7	1.2	0.6	4.0			
8500.00	-4.7	-5.4	-4.2	-4.4	1.2	0.6	4.1			

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
5500.0	69.9	69.9	69.8	69.5	68.5	64.9	58.9	38.6	37.8	36.7	36.3	33.9	30.2	24.0
6000.0	75.3	75.4	75.3	75.1	74.8	73.6	68.1	38.6	38.0	37.7	35.7	32.8	27.8	18.6
7000.0	86.4	86.3	86.1	85.8	85.0	83.0	75.7	37.6	38.6	38.2	34.9	32.2	28.2	22.2
8000.0	83.6	83.6	83.4	83.3	82.8	81.4	75.0	37.7	37.8	37.1	36.8	34.9	31.5	25.5
8500.0	92.3	92.3	92.3	92.3	92.0	89.4	96.6	38.1	37.0	35.7	32.9	28.3	19.4	15.9



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +5.75 V, V_{EN} = +5.75 V, I_{DD} = 93 mA, I_{EN} = 2.48 mA @ Temperature = + 85°C

FREQ (GHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	
					K	Measure										
200.00	14.9	-33.1	-1.9	-4.7	1.5	1.0	19.4	21.5	5.2	29.8	31.7	33.1	32.6	32.7	32.4	32.0
300.00	19.7	-28.3	-5.9	-8.9	1.2	0.8	20.4	22.0	2.9	29.2	33.3	33.9	33.6	33.6	33.3	33.3
400.00	21.2	-26.8	-12.0	-15.1	1.2	0.7	21.2	22.4	2.2	33.0	35.8	34.2	34.6	34.8	34.8	34.5
500.00	21.5	-26.4	-18.0	-18.6	1.2	0.7	21.6	22.6	1.9	31.5	33.3	34.7	34.6	34.7	34.9	34.5
600.00	21.6	-26.4	-18.7	-17.8	1.1	0.7	21.9	22.7	1.7	33.1	34.1	34.9	35.2	35.8	35.7	35.4
700.00	21.6	-26.3	-17.1	-16.7	1.1	0.6	22.1	22.9	1.6	33.4	35.1	34.5	35.1	35.4	35.2	34.9
800.00	21.6	-26.4	-16.1	-16.3	1.1	0.6	22.2	23.0	1.6	33.7	36.1	34.6	35.2	34.9	34.7	34.4
900.00	21.6	-26.4	-15.6	-16.2	1.1	0.7	22.3	23.1	1.6	34.1	36.1	35.3	35.1	35.0	34.7	34.7
1000.00	21.6	-26.5	-15.3	-16.4	1.1	0.7	22.4	23.2	1.6	33.9	36.2	35.4	35.8	35.6	35.2	35.1
1100.00	21.6	-26.5	-15.3	-16.8	1.1	0.7	22.3	23.1	1.6	34.1	34.3	34.6	35.4	34.8	34.9	34.7
1200.00	21.6	-26.5	-15.4	-17.5	1.1	0.7	22.4	23.2	1.6	33.4	33.8	34.4	34.8	34.7	34.6	34.4
1300.00	21.6	-26.6	-15.6	-18.3	1.2	0.7	22.4	23.3	1.6	32.3	33.1	34.3	34.2	34.2	34.1	33.8
1400.00	21.7	-26.6	-15.8	-19.4	1.2	0.7	22.4	23.2	1.6	36.0	34.0	34.9	34.7	34.6	34.5	34.4
1500.00	21.7	-26.6	-16.0	-20.8	1.2	0.7	22.3	23.3	1.6	32.6	32.9	33.2	33.5	33.3	33.2	33.0
1600.00	21.6	-26.7	-16.0	-22.6	1.2	0.7	22.3	23.3	1.7	32.6	33.1	33.5	33.4	33.9	33.8	33.6
1700.00	21.7	-26.8	-15.9	-24.1	1.2	0.7	22.4	23.5	1.7	31.6	33.4	32.8	33.4	33.3	33.2	33.0
1800.00	21.7	-26.9	-15.9	-26.4	1.2	0.7	22.3	23.4	1.7	31.5	33.2	33.6	33.2	33.1	33.1	32.9
1900.00	21.7	-26.8	-15.6	-27.7	1.2	0.7	22.2	23.4	1.8	30.2	32.8	31.6	32.0	32.2	32.1	31.9
2000.00	21.7	-26.9	-15.3	-27.1	1.2	0.7	22.0	23.2	1.8	32.7	32.1	32.9	32.8	32.6	32.5	32.5
2100.00	21.7	-27.0	-14.7	-25.1	1.2	0.7	22.1	23.5	1.8	32.0	32.6	32.0	32.5	32.6	32.3	32.2
2200.00	21.7	-27.0	-14.2	-23.1	1.2	0.7	22.0	23.4	1.8	33.2	32.3	32.7	33.0	32.8	32.8	32.7
2300.00	21.7	-27.1	-13.6	-21.0	1.2	0.7	22.0	23.5	1.8	30.1	32.6	31.6	32.4	32.4	32.4	32.2
2400.00	21.7	-27.3	-13.1	-19.5	1.2	0.8	21.7	23.5	1.8	33.7	31.7	31.4	31.2	31.2	30.9	30.9
2500.00	21.6	-27.3	-12.6	-18.2	1.2	0.8	21.5	23.5	1.9	31.2	31.6	31.1	31.2	31.2	31.0	30.7
2600.00	21.6	-27.5	-12.1	-17.1	1.2	0.8	21.3	23.4	1.9	30.8	30.6	30.4	30.9	31.0	30.8	30.5
2700.00	21.6	-27.6	-11.7	-16.3	1.2	0.8	21.0	23.1	2.0	30.6	30.8	31.3	31.5	31.3	31.2	31.1
2800.00	21.6	-27.7	-11.3	-15.5	1.2	0.8	20.9	23.0	2.0	31.0	31.2	30.5	30.8	30.7	30.6	30.6
2900.00	21.5	-27.8	-10.8	-14.8	1.2	0.8	20.7	22.8	2.0	29.9	29.5	30.0	29.8	29.7	29.4	29.4
3000.00	21.5	-27.8	-10.5	-14.2	1.2	0.8	20.8	22.9	2.0	30.2	30.3	29.8	29.8	29.8	29.7	29.5
3100.00	21.5	-28.0	-10.2	-13.8	1.2	0.8	20.6	23.0	2.0	28.7	29.8	29.4	29.5	29.4	29.3	29.0
3200.00	21.5	-28.0	-9.9	-13.5	1.2	0.8	20.7	23.1	2.0	30.0	30.1	29.9	29.6	29.7	29.7	29.4
3300.00	21.5	-28.0	-9.8	-13.3	1.2	0.8	20.5	22.9	2.0	29.6	29.8	29.6	29.7	29.7	29.5	29.3
3400.00	21.5	-28.0	-9.6	-13.1	1.2	0.8	20.4	22.7	2.1	30.2	29.1	30.0	30.0	30.0	29.8	29.8
3500.00	21.5	-28.1	-9.6	-13.1	1.2	0.8	20.5	22.8	2.1	28.9	29.6	29.4	29.3	29.3	29.2	29.0
3600.00	21.5	-28.1	-9.6	-13.2	1.2	0.8	20.5	22.7	2.0	30.1	29.4	29.2	29.3	29.2	29.1	28.9
3700.00	21.6	-28.2	-9.5	-13.3	1.2	0.8	20.7	22.9	2.0	31.2	29.6	30.0	30.5	30.3	30.3	30.2
3800.00	21.6	-28.2	-9.7	-13.6	1.2	0.8	20.7	22.9	2.0	29.2	30.0	29.3	29.2	29.3	29.2	29.0
3900.00	21.6	-28.2	-9.8	-13.8	1.2	0.8	20.8	23.0	1.9	28.8	29.7	29.3	29.3	29.5	29.5	29.4
4000.00	21.7	-28.3	-10.0	-14.2	1.2	0.8	20.7	23.1	1.9	29.0	29.5	29.7	29.9	29.9	29.9	29.8
4100.00	21.7	-28.3	-10.3	-14.8	1.3	0.8	20.7	23.1	1.9	29.8	29.3	29.1	29.3	29.5	29.4	29.4
4200.00	21.8	-28.3	-10.5	-15.4	1.3	0.8	20.8	23.1	1.8	28.9	29.4	28.7	29.3	29.3	29.4	29.4
4300.00	21.8	-28.4	-10.8	-15.8	1.3	0.8	20.7	23.1	1.9	28.7	29.0	29.2	29.5	29.6	29.5	29.5
4400.00	21.9	-28.4	-11.3	-16.5	1.3	0.8	20.7	23.1	1.8	29.9	28.8	29.0	29.1	29.4	29.2	29.2
4500.00	22.0	-28.4	-11.6	-17.3	1.3	0.8	20.4	23.0	1.9	29.8	28.9	29.2	29.1	29.1	29.0	29.0
4600.00	22.0	-28.4	-12.2	-18.0	1.3	0.8	20.2	22.8	1.9	28.9	28.7	28.7	28.8	28.9	28.8	28.8
4700.00	22.0	-28.5	-12.7	-19.0	1.3	0.8	20.3	22.9	1.9	28.6	28.6	28.5	28.6	28.7	28.7	28.5
4800.00	22.1	-28.6	-13.1	-19.4	1.3	0.8	20.5	23.0	1.9	29.4	28.5	28.9	29.0	29.1	29.2	29.1
4900.00	22.1	-28.7	-13.9	-20.2	1.3	0.8	20.4	22.8	1.9	28.6	28.9	28.4	28.4	28.4	28.5	28.3
5000.00	22.2	-28.7	-14.3	-21.3	1.3	0.8	20.3	22.6	1.9	28.0	28.1	28.1	28.0	28.1	28.0	28.0
5100.00	22.3	-28.9	-14.6	-21.5	1.3	0.8	20.7	22.8	1.9	27.8	28.4	27.7	27.9	28.0	28.0	28.0
5200.00	22.3	-28.9	-15.3	-22.2	1.3	0.8	20.8	22.7	1.9	27.4	28.1	27.8	27.9	28.1	28.3	28.4
5300.00	22.4	-28.9	-15.1	-22.1	1.3	0.8	20.4	22.6	1.9	27.3	28.4	27.6	27.8	28.0	28.1	28.1
5400.00	22.3	-29.1	-15.1	-21.7	1.3	0.8	19.8	22.3	1.9	27.5	27.9	27.9	27.9	28.0	28.0	28.0
5500.00	22.3	-29.1	-15.2	-22.5	1.3	0.8	19.5	22.1	1.9	27.3	28.0	27.2	27.1	27.2	27.0	27.0
5600.00	22.4	-29.2	-14.0	-21.0	1.3	0.8	18.9	21.6	1.9	27.2	27.6	27.2	27.2	27.3	27.3	27.0
5700.00	22.2	-29.6	-13.6	-20.1	1.4	0.9	18.8	21.3	1.9	25.9	27.5	26.4	26.4	26.3	26.0	26.0
5800.00	22.3	-29.5	-12.9	-20.0	1.4	0.9	18.8	21.0	1.9	26.4	26.9	26.1	26.2	26.2	26.2	25.8
5900.00	22.3	-29.8	-11.5	-18.0	1.4	0.9	18.8	20.7	2.0	26.5	26.4	26.3	26.4	26.3	26.3	26.0
6000.00	22.1	-30.0	-11.2	-17.8	1.4	0.9	18.7	20.3	2.0	26.1	26.5	26.0	26.0	26.0	25.8	25.5
6100.00	22.2	-29.9	-10.0	-16.5	1.4	0.9	18.9	20.2	2.1	25.9	26.4	26.2	26.2	26.2	26.2	26.1
6200.00	21.9	-30.5	-9.0	-14.9	1.4	0.9	18.9	20.1	2.1	25.9	25.5	26.1	26.1	26.0	25.9	25.8
6300.00	21.8	-30.6	-8.7	-14.5	1.5	0.9	18.8	19.9	2.1	25.2	25.7	25.3	25.5	25.5	25.4	25.3
6400.00	21.8	-31.0	-7.6	-13.1	1.5	1.0	18.8	19.9	2.2	25.8	26.0	25.8	25.9	25		

TEST CONDITIONS: $V_{DD} = +5.75$ V, $V_{EN} = +5.75$ V, $I_{DD} = 93$ mA, $I_{EN} = 2.48$ mA @ Temperature = + 85°C

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	44.5	44.4	44.4	44.3	44.2	44.0	43.7
1000.0	43.6	43.5	43.4	43.2	43.0	42.8	42.4
2000.0	41.8	41.6	41.5	41.3	41.1	40.8	40.6
4000.0	44.2	44.1	43.9	43.7	43.5	43.3	43.3
6000.0	34.1	33.9	33.7	33.4	33.2	32.9	32.7
8000.0	38.7	38.4	38.1	38.0	38.4	39.8	42.1



Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +5.75 V, V_{EN} = +5.75 V, I_{DD} = 99 mA, I_{EN} = 2.45 mA @ Temperature = +85°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure (dBm)										
5500.00	21.5	-29.8	-8.9	-8.8	1.4	0.8	19.2	2.0	27.5	27.9	28.1	28.2	28.3	28.2	28.2	
5600.00	21.6	-29.8	-8.7	-8.8	1.4	0.8	18.8	21.5	2.0	26.8	26.8	26.9	27.0	26.9	26.7	
5700.00	21.6	-29.9	-9.0	-9.0	1.4	0.8	18.6	21.3	2.0	26.5	27.0	27.0	27.1	27.1	26.9	
5800.00	21.7	-30.0	-8.7	-9.0	1.4	0.8	18.6	21.1	2.0	27.2	26.7	27.0	27.0	27.0	26.9	
5900.00	21.7	-29.9	-9.0	-9.2	1.4	0.8	18.5	20.7	2.0	26.3	26.7	26.6	26.6	26.6	26.5	
6000.00	21.8	-30.2	-8.7	-9.1	1.4	0.8	18.4	20.3	2.0	25.2	25.6	25.4	25.4	25.4	25.1	
6100.00	21.8	-30.1	-8.9	-9.4	1.4	0.8	18.9	20.5	2.0	26.4	26.0	26.1	26.2	26.3	26.3	
6200.00	21.9	-30.2	-8.6	-9.3	1.4	0.8	19.1	20.5	2.0	25.9	25.9	25.7	25.8	25.9	26.0	
6300.00	21.9	-30.3	-8.8	-9.6	1.4	0.8	19.4	20.7	2.0	26.0	26.6	26.5	26.6	26.8	27.0	
6400.00	22.0	-30.5	-8.5	-9.5	1.4	0.8	19.6	20.8	2.0	26.2	26.4	26.4	26.5	26.7	26.9	
6500.00	22.0	-30.6	-8.7	-9.9	1.4	0.8	19.6	20.7	2.1	26.1	26.3	26.4	26.6	26.8	27.0	
6600.00	22.0	-30.9	-8.4	-9.8	1.5	0.8	19.8	20.9	2.0	26.5	26.1	26.4	26.6	26.9	27.1	
6700.00	22.0	-30.9	-8.7	-10.2	1.5	0.8	19.8	20.9	2.1	26.2	26.2	26.4	26.6	26.7	27.3	
6800.00	22.0	-31.3	-8.5	-10.2	1.5	0.9	19.9	20.9	2.1	26.3	26.6	26.6	26.7	27.0	27.6	
6900.00	22.0	-31.4	-8.7	-10.6	1.6	0.9	19.9	21.0	2.1	25.8	26.3	26.5	26.8	27.1	27.8	
7000.00	22.0	-31.8	-8.5	-10.7	1.6	0.9	20.0	21.0	2.2	26.1	26.2	26.4	26.7	27.0	27.4	
7100.00	21.9	-31.8	-8.8	-11.2	1.6	0.9	19.9	20.9	2.2	25.9	26.2	26.4	26.8	27.0	27.8	
7200.00	21.9	-32.4	-8.5	-11.4	1.7	0.9	20.0	20.9	2.2	26.3	26.2	26.4	26.6	26.9	27.3	
7300.00	21.8	-32.6	-8.8	-12.1	1.8	0.9	19.9	20.8	2.3	25.4	26.2	25.9	26.2	26.5	27.0	
7400.00	21.7	-33.1	-8.5	-12.3	1.9	1.0	19.9	20.8	2.3	25.9	26.2	25.8	26.2	26.6	27.4	
7500.00	21.5	-33.6	-8.7	-13.2	2.0	1.0	19.7	20.5	2.4	25.7	26.2	26.0	26.3	26.6	27.1	
7600.00	21.3	-34.4	-8.2	-13.4	2.2	1.0	19.6	20.3	2.5	26.2	26.3	26.2	26.4	26.7	27.5	
7700.00	20.9	-34.5	-8.3	-14.6	2.3	1.0	19.5	20.2	2.6	25.0	25.0	25.1	25.3	25.7	26.5	
7800.00	20.6	-35.7	-7.6	-14.8	2.7	1.1	19.3	20.0	2.7	25.2	25.3	25.7	26.0	26.4	26.9	
7900.00	20.1	-36.3	-7.6	-16.1	2.9	1.1	19.1	19.8	2.8	25.6	25.3	25.7	26.0	26.3	26.9	
8000.00	19.5	-37.6	-6.7	-15.4	3.4	1.2	18.9	19.5	2.9	24.7	24.8	25.1	25.4	25.9	26.5	
8100.00	19.0	-37.9	-6.4	-15.7	3.7	1.2	18.6	19.2	3.0	24.6	24.9	25.1	25.5	25.9	26.5	
8200.00	18.0	-39.8	-5.5	-13.9	4.6	1.2	18.2	18.7	3.2	24.2	24.6	24.9	24.9	25.5	26.2	
8300.00	17.3	-40.0	-5.2	-13.2	4.9	1.2	17.9	18.4	3.4	24.4	24.6	24.9	25.3	25.8	26.5	
8400.00	16.0	-42.2	-4.4	-11.1	6.4	1.3	17.3	17.8	3.6	25.1	25.0	25.3	25.6	26.3	26.8	
8500.00	15.2	-42.4	-4.0	-10.2	6.6	1.3	16.7	17.2	3.8	23.6	23.5	24.3	24.8	25.6	24.2	

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)
5500.0	37.6	37.6	37.4	37.2	37.0	36.8	36.6
6000.0	34.9	34.7	34.5	34.3	34.0	33.7	33.5
7000.0	44.5	44.4	44.2	44.0	43.8	43.6	43.6
8000.0	52.6	52.5	52.2	52.1	51.9	51.7	51.7
8500.0	60.6	60.3	60.1	59.9	59.7	59.6	60.0



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +5.75$ V, $V_{EN} = 0$ V, $I_{DD} = 4$ mA, $I_{EN} = 0$ mA @ Temperature = +85°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)
					K	Measure	
200.00	-3.8	-3.9	-4.0	-9.2	1.1	0.9	3.6
300.00	-2.4	-2.5	-6.6	-12.0	1.0	0.7	2.5
400.00	-1.8	-1.9	-9.3	-14.1	1.0	0.6	2.1
500.00	-1.5	-1.5	-12.0	-15.7	1.0	0.5	2.0
600.00	-1.3	-1.4	-14.9	-16.9	1.0	0.5	1.3
700.00	-1.2	-1.3	-18.1	-17.7	1.0	0.5	1.4
800.00	-1.2	-1.3	-22.0	-17.8	1.0	0.4	1.6
900.00	-1.2	-1.3	-26.9	-17.6	1.0	0.4	1.5
1000.00	-1.2	-1.3	-30.1	-17.2	1.0	0.4	1.4
1100.00	-1.2	-1.3	-26.4	-16.9	1.0	0.4	1.5
1200.00	-1.2	-1.3	-22.9	-16.7	1.0	0.4	1.6
1300.00	-1.2	-1.3	-20.5	-16.2	1.0	0.4	1.3
1400.00	-1.2	-1.3	-18.7	-15.8	1.0	0.4	1.5
1500.00	-1.3	-1.4	-17.3	-15.5	1.0	0.5	1.5
1600.00	-1.3	-1.4	-16.2	-15.3	1.0	0.5	1.5
1700.00	-1.3	-1.5	-15.4	-15.3	1.0	0.5	1.6
1800.00	-1.4	-1.5	-14.7	-15.2	1.0	0.5	1.6
1900.00	-1.4	-1.6	-14.2	-15.0	1.0	0.5	1.7
2000.00	-1.4	-1.6	-13.7	-15.0	1.0	0.5	1.6
2100.00	-1.5	-1.7	-13.5	-15.2	1.0	0.5	1.7
2200.00	-1.5	-1.7	-13.2	-15.4	1.0	0.5	2.1
2300.00	-1.5	-1.8	-13.1	-15.6	1.0	0.6	2.0
2400.00	-1.5	-1.8	-13.0	-15.9	1.0	0.6	2.0
2500.00	-1.6	-1.9	-13.0	-16.3	1.1	0.6	2.0
2600.00	-1.6	-1.9	-13.0	-16.9	1.1	0.6	2.1
2700.00	-1.6	-2.0	-13.1	-17.6	1.1	0.6	2.2
2800.00	-1.6	-2.0	-13.2	-18.3	1.1	0.6	2.2
2900.00	-1.6	-2.1	-13.4	-19.1	1.1	0.6	2.1
3000.00	-1.7	-2.1	-13.5	-20.2	1.1	0.7	2.2
3100.00	-1.7	-2.1	-13.6	-21.6	1.1	0.7	2.5
3200.00	-1.7	-2.1	-13.7	-23.2	1.1	0.7	1.9
3300.00	-1.7	-2.1	-13.8	-24.8	1.1	0.7	2.1
3400.00	-1.7	-2.1	-13.8	-26.4	1.1	0.7	2.2
3500.00	-1.7	-2.1	-13.8	-27.2	1.1	0.7	2.2
3600.00	-1.7	-2.1	-13.8	-25.9	1.1	0.7	2.3
3700.00	-1.7	-2.1	-13.7	-23.7	1.1	0.7	2.2
3800.00	-1.8	-2.1	-13.5	-21.8	1.1	0.7	2.2
3900.00	-1.8	-2.1	-13.3	-20.2	1.1	0.7	2.2
4000.00	-1.8	-2.1	-13.1	-18.7	1.1	0.7	1.9
4100.00	-1.8	-2.2	-12.8	-17.3	1.1	0.7	2.2
4200.00	-1.8	-2.2	-12.5	-16.3	1.1	0.6	2.0
4300.00	-1.9	-2.2	-12.3	-15.4	1.1	0.6	2.1
4400.00	-1.9	-2.2	-12.0	-14.7	1.1	0.6	1.9
4500.00	-1.9	-2.3	-11.8	-14.0	1.1	0.6	2.2
4600.00	-1.9	-2.3	-11.5	-13.5	1.1	0.6	2.1
4700.00	-1.9	-2.3	-11.4	-13.0	1.1	0.6	2.6
4800.00	-1.9	-2.4	-11.3	-12.7	1.1	0.6	2.2
4900.00	-2.0	-2.4	-11.2	-12.4	1.1	0.6	2.0
5000.00	-1.9	-2.4	-11.0	-12.1	1.1	0.6	1.9
5100.00	-2.0	-2.4	-11.0	-11.9	1.1	0.6	2.2
5200.00	-1.9	-2.5	-10.9	-11.7	1.1	0.6	2.0
5300.00	-1.9	-2.4	-11.0	-11.7	1.1	0.6	2.2
5400.00	-2.0	-2.5	-11.0	-11.6	1.1	0.6	1.9
5500.00	-1.9	-2.5	-11.0	-11.4	1.1	0.6	2.2
5600.00	-1.9	-2.5	-11.2	-11.5	1.1	0.6	1.8
5700.00	-1.9	-2.5	-11.3	-11.6	1.1	0.6	1.8
5800.00	-1.9	-2.4	-11.5	-11.5	1.1	0.6	1.5
5900.00	-1.8	-2.4	-11.8	-11.8	1.1	0.6	1.3
6000.00	-1.8	-2.4	-11.9	-11.7	1.1	0.6	1.9
6100.00	-1.8	-2.4	-12.3	-11.9	1.1	0.6	2.2
6200.00	-1.8	-2.4	-12.7	-12.2	1.1	0.6	1.9
6300.00	-1.7	-2.4	-12.9	-12.3	1.1	0.6	2.2
6400.00	-1.7	-2.4	-13.3	-12.5	1.1	0.6	2.0
6500.00	-1.7	-2.4	-13.6	-12.6	1.1	0.6	1.4
6600.00	-1.7	-2.4	-13.8	-12.7	1.1	0.6	1.6
6700.00	-1.6	-2.4	-14.3	-13.1	1.1	0.6	1.9
6800.00	-1.7	-2.4	-14.6	-13.2	1.1	0.6	1.7
6900.00	-1.6	-2.4	-14.6	-13.2	1.1	0.6	1.7
7000.00	-1.7	-2.4	-14.8	-13.3	1.1	0.6	1.5
7100.00	-1.7	-2.4	-14.8	-13.3	1.1	0.6	1.8
7200.00	-1.7	-2.4	-14.6	-13.3	1.1	0.6	1.6
7300.00	-1.8	-2.5	-14.4	-13.1	1.1	0.6	1.9
7400.00	-1.9	-2.6	-13.9	-12.7	1.1	0.6	1.1
7500.00	-1.9	-2.6	-13.4	-12.5	1.1	0.6	2.1
7600.00	-2.0	-2.7	-13.0	-12.2	1.2	0.7	1.3
7700.00	-2.1	-2.8	-12.2	-11.6	1.2	0.7	1.6
7800.00	-2.2	-2.9	-11.6	-11.2	1.2	0.7	1.9
7900.00	-2.4	-3.1	-11.0	-10.6	1.2	0.7	2.0
8000.00	-2.5	-3.1	-10.1	-9.9	1.2	0.7	2.1

TEST CONDITIONS: $V_{DD} = +5.75$ V, $V_{EN} = 0$ V, $I_{DD} = 4$ mA, $I_{EN} = 0$ mA @ Temperature = $+85^\circ\text{C}$

FREQ (MHz)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
400.0	30.2	29.0	26.9	23.8	18.8	15.2	14.3
1000.0	32.2	31.0	29.0	25.6	19.7	14.5	15.6
2000.0	34.1	33.3	31.9	29.5	25.6	18.9	16.3
4000.0	34.6	34.3	33.5	32.1	29.7	25.6	19.8
6000.0	35.4	35.1	34.2	32.3	29.2	23.8	17.3
8000.0	35.9	35.7	34.6	32.9	29.9	24.3	17.1

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	70.8	70.0	68.5	65.3	57.3	46.5	46.0
1000.0	71.1	71.1	70.7	68.5	59.1	52.8	52.0
2000.0	70.9	70.6	70.2	69.3	66.7	58.0	51.4
4000.0	72.5	72.6	72.5	72.9	73.4	73.5	56.0
6000.0	72.6	72.5	72.3	71.9	70.9	66.2	56.8
8000.0	83.4	83.3	83.2	82.8	82.0	78.9	68.1

FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
400.0	12.0	9.0
1000.0	11.6	9.4
2000.0	13.3	10.9
4000.0	15.3	12.8
6000.0	15.7	12.9
8000.0	15.6	12.3

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +5.75$ V, $V_{EN} = 0$ V, $I_{DD} = 4$ mA, $I_{EN} = 0$ mA @ Temperature = +85°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)	FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
					K	Measure				
5500.00	-1.7	-2.4	-19.9	-17.3	1.1	0.7	2.9	5500.0	14.7	11.7
5600.00	-1.7	-2.4	-20.4	-17.2	1.1	0.7	2.8	6000.0	15.3	12.3
5700.00	-1.7	-2.4	-20.2	-16.9	1.1	0.7	2.9	7000.0	16.8	13.3
5800.00	-1.7	-2.4	-19.8	-16.3	1.1	0.7	2.8	8000.0	17.6	12.2
5900.00	-1.7	-2.5	-18.9	-15.8	1.1	0.7	2.8	8500.0	16.4	10.9
6000.00	-1.7	-2.5	-18.1	-15.2	1.1	0.7	2.7			
6100.00	-1.7	-2.5	-17.0	-14.5	1.1	0.7	2.7			
6200.00	-1.7	-2.5	-16.2	-13.9	1.1	0.7	3.1			
6300.00	-1.8	-2.6	-15.2	-13.2	1.1	0.7	2.8			
6400.00	-1.8	-2.6	-14.5	-12.7	1.1	0.7	2.9			
6500.00	-1.8	-2.7	-13.7	-12.1	1.1	0.7	2.8			
6600.00	-1.9	-2.7	-13.0	-11.6	1.1	0.7	2.8			
6700.00	-1.9	-2.8	-12.2	-11.0	1.1	0.7	2.9			
6800.00	-2.0	-2.9	-11.6	-10.6	1.1	0.7	3.0			
6900.00	-2.0	-2.9	-11.0	-10.1	1.1	0.7	2.9			
7000.00	-2.1	-3.0	-10.4	-9.7	1.1	0.7	3.2			
7100.00	-2.2	-3.1	-9.8	-9.2	1.1	0.7	3.0			
7200.00	-2.3	-3.2	-9.3	-8.8	1.1	0.6	3.3			
7300.00	-2.5	-3.3	-8.8	-8.4	1.1	0.6	3.2			
7400.00	-2.6	-3.4	-8.3	-8.0	1.1	0.6	3.4			
7500.00	-2.7	-3.6	-7.8	-7.5	1.2	0.6	3.0			
7600.00	-2.9	-3.7	-7.4	-7.2	1.2	0.6	3.2			
7700.00	-3.1	-3.9	-6.9	-6.8	1.2	0.6	3.3			
7800.00	-3.2	-4.1	-6.5	-6.5	1.2	0.6	3.1			
7900.00	-3.4	-4.3	-6.1	-6.1	1.2	0.6	3.8			
8000.00	-3.6	-4.4	-5.8	-5.8	1.2	0.6	4.0			
8100.00	-3.8	-4.6	-5.3	-5.4	1.2	0.6	4.4			
8200.00	-4.1	-4.8	-5.1	-5.2	1.2	0.6	4.0			
8300.00	-4.3	-5.0	-4.7	-4.8	1.2	0.6	4.1			
8400.00	-4.5	-5.3	-4.5	-4.7	1.2	0.6	4.0			
8500.00	-4.7	-5.4	-4.2	-4.4	1.2	0.6	4.2			

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
5500.0	70.6	70.6	70.5	70.2	69.1	65.2	58.9	36.6	36.5	35.5	34.9	32.5	28.7	22.2
6000.0	75.9	75.8	75.7	75.4	75.0	73.6	67.6	37.5	37.1	36.4	34.4	31.4	26.2	17.7
7000.0	86.5	86.4	86.2	85.8	85.0	82.5	73.8	37.4	37.3	36.7	33.7	31.0	26.8	20.9
8000.0	83.7	83.7	83.6	83.4	82.8	81.1	73.9	37.5	37.2	36.2	35.6	33.6	30.1	23.4
8500.0	92.8	92.8	92.8	92.7	92.1	89.7	105.5	37.0	36.0	34.3	31.6	26.8	17.7	15.7



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +6.0 V, V_{EN} = +6.0 V, I_{DD} = 99 mA, I_{EN} = 2.59 mA @ Temperature = + 85°C

FREQ (GHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	
					K	Measure										
200.00	15.0	-33.2	-1.9	-4.8	1.5	1.0	20.9	22.0	5.3	34.8	32.6	33.2	31.8	32.8	33.1	32.5
300.00	19.8	-28.3	-5.9	-8.9	1.2	0.8	21.2	22.3	2.9	36.9	31.4	34.0	32.8	34.0	33.8	33.9
400.00	21.3	-26.9	-12.2	-15.1	1.2	0.7	21.8	22.8	2.2	34.3	33.5	35.1	34.7	35.0	35.0	35.0
500.00	21.6	-26.5	-18.0	-18.3	1.2	0.7	22.1	22.9	1.9	34.7	34.6	35.4	34.7	34.9	34.9	35.0
600.00	21.7	-26.4	-18.4	-17.5	1.1	0.7	22.4	23.0	1.7	35.8	36.5	36.1	35.2	36.2	35.9	35.9
700.00	21.7	-26.5	-16.7	-16.4	1.1	0.6	22.5	23.2	1.6	34.2	34.1	35.5	34.8	35.5	35.5	35.4
800.00	21.7	-26.5	-15.7	-16.0	1.1	0.6	22.6	23.3	1.6	35.9	35.6	35.4	34.7	35.4	35.3	35.0
900.00	21.7	-26.5	-15.2	-15.9	1.1	0.7	22.7	23.4	1.6	33.1	34.3	36.2	35.1	35.6	35.7	35.2
1000.00	21.7	-26.6	-15.0	-16.0	1.1	0.7	22.8	23.5	1.6	39.1	34.9	35.6	34.9	35.8	36.1	35.8
1100.00	21.7	-26.6	-15.0	-16.5	1.1	0.7	22.7	23.5	1.6	33.1	34.6	34.7	34.6	35.7	35.6	35.3
1200.00	21.7	-26.6	-15.2	-17.1	1.1	0.7	22.8	23.6	1.6	34.8	35.1	35.7	33.6	35.3	35.1	35.0
1300.00	21.7	-26.7	-15.4	-17.9	1.2	0.7	22.8	23.6	1.6	34.9	34.9	34.3	34.2	34.6	34.6	34.5
1400.00	21.7	-26.7	-15.7	-18.9	1.2	0.7	22.8	23.5	1.6	34.8	35.6	35.3	34.6	35.2	35.5	35.0
1500.00	21.7	-26.7	-15.9	-20.3	1.2	0.7	22.7	23.6	1.6	31.1	32.9	33.4	33.3	33.9	34.1	33.7
1600.00	21.7	-26.8	-16.0	-21.9	1.2	0.7	22.7	23.7	1.7	33.9	34.1	33.4	33.1	34.4	34.3	34.2
1700.00	21.8	-26.9	-16.0	-23.3	1.2	0.7	22.8	23.8	1.7	31.1	32.4	33.2	33.0	34.0	34.0	33.6
1800.00	21.8	-26.9	-16.0	-25.4	1.2	0.7	22.7	23.7	1.7	31.3	32.8	33.9	32.0	33.7	33.7	33.5
1900.00	21.8	-26.9	-15.9	-27.2	1.2	0.7	22.6	23.7	1.8	33.0	34.0	33.2	32.3	32.9	33.0	32.6
2000.00	21.8	-27.0	-15.6	-27.0	1.2	0.7	22.3	23.6	1.8	31.9	33.1	33.5	32.0	33.2	33.3	33.2
2100.00	21.8	-27.1	-15.1	-25.6	1.2	0.7	22.5	23.8	1.8	32.2	33.7	32.7	32.6	33.3	32.9	32.9
2200.00	21.8	-27.0	-14.6	-23.6	1.2	0.7	22.4	23.7	1.8	32.4	35.2	33.7	32.4	33.1	33.5	33.4
2300.00	21.8	-27.2	-14.0	-21.5	1.2	0.7	22.4	23.9	1.8	33.6	31.8	32.7	32.2	33.1	32.9	32.9
2400.00	21.8	-27.3	-13.4	-19.9	1.2	0.7	22.1	23.8	1.9	30.0	32.6	32.1	31.3	31.9	31.7	31.6
2500.00	21.8	-27.4	-12.9	-18.6	1.2	0.8	21.9	23.8	1.9	30.7	32.4	32.1	30.8	31.6	31.6	31.4
2600.00	21.7	-27.5	-12.4	-17.5	1.2	0.8	21.7	23.7	1.9	31.3	31.6	31.4	30.6	31.5	31.4	31.2
2700.00	21.7	-27.6	-12.0	-16.6	1.2	0.8	21.4	23.4	2.0	34.0	31.2	32.1	30.8	31.8	31.7	
2800.00	21.7	-27.7	-11.5	-15.8	1.2	0.8	21.4	23.3	2.0	30.1	31.7	31.3	30.6	31.3	31.4	31.2
2900.00	21.7	-27.9	-11.1	-15.0	1.2	0.8	21.1	23.1	2.0	30.3	30.6	29.9	30.5	30.4	30.2	
3000.00	21.6	-27.9	-10.7	-14.4	1.2	0.8	21.2	23.2	2.0	30.3	30.5	29.5	30.5	30.4	30.2	
3100.00	21.6	-28.0	-10.4	-14.0	1.2	0.8	20.9	23.2	2.0	30.1	30.5	30.2	28.9	30.0	29.8	29.7
3200.00	21.6	-28.1	-10.1	-13.6	1.2	0.8	21.1	23.3	2.0	29.4	31.3	30.5	29.2	30.4	30.3	30.1
3300.00	21.6	-28.0	-9.9	-13.5	1.2	0.8	20.9	23.1	2.0	29.0	30.8	30.2	29.3	30.1	30.2	30.0
3400.00	21.6	-28.1	-9.8	-13.3	1.2	0.8	20.8	23.0	2.1	30.5	30.2	29.5	29.5	30.5	30.6	30.5
3500.00	21.6	-28.2	-9.7	-13.3	1.2	0.8	20.9	23.0	2.1	30.5	29.7	29.8	28.6	29.9	29.9	29.7
3600.00	21.6	-28.1	-9.7	-13.4	1.2	0.8	20.8	22.9	2.0	29.6	29.5	29.9	28.7	29.7	29.8	29.6
3700.00	21.7	-28.2	-9.7	-13.5	1.2	0.8	21.1	23.1	2.0	29.4	30.7	31.2	29.5	30.6	30.8	30.8
3800.00	21.7	-28.2	-9.8	-13.8	1.2	0.8	21.1	23.1	2.0	28.5	30.9	29.9	28.9	29.7	29.8	29.7
3900.00	21.7	-28.3	-9.9	-14.1	1.2	0.8	21.2	23.1	1.9	30.8	30.8	30.1	28.7	30.0	30.0	30.0
4000.00	21.8	-28.3	-10.0	-14.4	1.2	0.8	21.1	23.2	1.9	30.6	30.5	30.2	29.0	30.2	30.3	30.5
4100.00	21.8	-28.4	-10.4	-15.0	1.3	0.8	21.1	23.2	1.9	29.7	29.9	28.8	28.8	29.9	29.8	30.1
4200.00	21.9	-28.4	-10.6	-15.6	1.2	0.8	21.2	23.2	1.9	29.8	29.7	29.4	28.8	29.8	29.8	30.0
4300.00	22.0	-28.4	-10.9	-16.0	1.3	0.8	21.1	23.1	1.9	29.8	29.7	29.7	29.7	29.9	30.0	30.2
4400.00	22.0	-28.4	-11.4	-16.8	1.3	0.8	21.0	23.1	1.8	28.5	29.5	29.7	28.6	29.6	29.6	29.8
4500.00	22.1	-28.5	-11.7	-17.6	1.3	0.8	20.8	23.0	1.9	28.4	29.1	29.5	28.3	29.6	29.7	
4600.00	22.1	-28.6	-12.2	-18.4	1.3	0.8	20.5	22.9	1.9	28.8	29.2	29.3	28.3	29.4	29.5	
4700.00	22.2	-28.5	-12.8	-19.4	1.3	0.8	20.6	23.0	1.9	28.5	28.8	28.9	27.9	28.9	29.2	
4800.00	22.3	-28.6	-13.1	-19.8	1.3	0.8	20.9	23.1	1.9	28.9	29.4	29.3	28.3	29.4	29.2	
4900.00	22.3	-28.7	-13.9	-20.6	1.3	0.8	20.7	22.8	1.9	28.3	28.9	28.9	27.7	28.9	28.6	
5000.00	22.3	-28.7	-14.3	-21.8	1.3	0.8	20.6	22.7	1.9	27.7	28.7	28.5	27.4	28.4	28.3	
5100.00	22.4	-28.8	-14.7	-21.9	1.3	0.8	21.0	22.8	1.9	27.9	28.7	28.1	27.1	28.3	28.6	
5200.00	22.4	-28.9	-15.4	-22.7	1.3	0.8	21.0	22.8	1.9	28.0	28.7	28.3	27.4	28.4	28.3	29.0
5300.00	22.5	-28.9	-15.2	-22.5	1.3	0.8	20.7	22.6	1.9	27.3	29.0	28.1	27.1	28.3	28.2	28.8
5400.00	22.5	-29.2	-15.2	-22.1	1.3	0.8	20.2	22.4	1.9	27.1	28.2	28.3	27.3	28.3	28.4	28.6
5500.00	22.5	-29.1	-15.3	-23.0	1.3	0.8	19.8	22.1	1.9	26.4	27.8	27.5	26.5	27.6	27.7	
5600.00	22.5	-29.2	-14.1	-21.3	1.3	0.8	19.2	21.7	1.9	27.2	27.8	27.6	26.3	27.7	27.6	
5700.00	22.4	-29.5	-13.7	-20.4	1.4	0.8	19.1	21.3	1.9	26.3	27.7	26.9	25.8	26.7	26.6	
5800.00	22.5	-29.5	-13.0	-20.3	1.4	0.8	19.1	21.1	1.9	26.2	27.1	26.7	25.5	26.5	26.4	
5900.00	22.4	-29.9	-11.5	-18.2	1.4	0.9	19.1	20.8	2.0	26.1	26.9	26.7	25.5	26.5	26.5	26.7
6000.00	22.2	-29.9	-11.3	-18.1	1.4	0.9	19.0	20.4	2.0	25.6	26.9	26.6	24.8	26.1	26.1	26.2
6100.00	22.3	-29.9	-10.1	-16.6	1.4	0.9	19.1	20.4	2.1	25.4	26.7	26.7	25.4	26.4	26.4	26.7
6200.00	22.1	-30.6	-9.0	-15.0	1.4	0.9	19.1	20.2	2.1	25.6	25.9	26.3	24.6	26.1	26.1	26.4
6300.00	22.0	-30.6	-8.7	-14.6	1.4	0.9	19.1	20.1	2.2	24.9	25.9	25.8	23.9	25.6	25.6	26.0
6400.00	21.9	-31.0	-7.6	-13.2	1.5	1.0	19.0	19.9	2.2	24.9	25.5	26.3	24.3	26.0	26.1	26.5
6500.00	21.6	-31.5	-7.0	-12.3												

TEST CONDITIONS: $V_{DD} = +6.0$ V, $V_{EN} = +6.0$ V, $I_{DD} = 99$ mA, $I_{EN} = 2.59$ mA @ Temperature = + 85°C

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	45.9	45.8	45.8	45.7	45.6	45.4	45.1
1000.0	44.7	44.6	44.5	44.4	44.2	44.0	43.6
2000.0	42.5	42.3	42.2	42.0	41.8	41.6	41.5
4000.0	44.0	43.9	43.7	43.6	43.5	43.3	43.4
6000.0	34.1	33.9	33.7	33.5	33.3	33.0	32.9
8000.0	38.9	38.6	38.4	38.3	38.8	40.0	42.3

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +6.0$ V, $V_{EN} = +6.0$ V, $I_{DD} = 105$ mA, $I_{EN} = 2.57$ mA @ Temperature = +85°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure (dBm)										
5500.00	21.6	-29.8	-8.8	-8.8	1.4	0.8	19.5	21.8	2.0	28.3	28.3	28.5	28.7	28.8	28.8	
5600.00	21.7	-29.9	-8.6	-8.9	1.4	0.8	19.1	21.5	2.0	27.5	27.4	27.1	27.2	27.5	27.3	
5700.00	21.7	-29.9	-8.9	-9.0	1.4	0.8	18.9	21.3	2.0	27.0	27.3	27.3	27.5	27.6	27.5	
5800.00	21.8	-30.0	-8.6	-9.0	1.4	0.8	18.9	21.1	2.0	26.7	27.6	27.1	27.3	27.4	27.5	
5900.00	21.8	-30.0	-8.9	-9.2	1.4	0.8	18.8	20.7	2.0	27.3	26.6	26.8	26.9	27.1	27.1	
6000.00	21.9	-30.1	-8.6	-9.1	1.4	0.8	18.7	20.4	2.0	26.1	25.8	25.8	25.8	25.9	25.7	
6100.00	21.9	-30.1	-8.8	-9.4	1.4	0.8	19.1	20.6	2.0	26.3	26.0	26.5	26.5	26.7	26.9	
6200.00	22.0	-30.2	-8.5	-9.3	1.4	0.8	19.3	20.6	2.0	25.6	25.8	26.1	26.1	26.5	26.6	
6300.00	22.0	-30.2	-8.7	-9.5	1.4	0.8	19.6	20.8	2.0	26.8	26.8	26.8	27.0	27.1	27.4	
6400.00	22.1	-30.6	-8.3	-9.4	1.4	0.8	19.8	20.9	2.0	26.4	26.3	26.6	26.7	27.0	27.3	
6500.00	22.1	-30.6	-8.5	-9.8	1.4	0.8	19.8	20.8	2.0	26.2	26.4	26.8	26.9	27.1	27.5	
6600.00	22.1	-30.9	-8.3	-9.7	1.4	0.8	20.0	21.0	2.0	26.1	26.6	26.8	26.8	27.2	27.5	
6700.00	22.1	-31.0	-8.6	-10.1	1.5	0.8	20.0	21.0	2.1	25.9	26.4	26.5	26.7	27.1	27.8	
6800.00	22.1	-31.3	-8.3	-10.0	1.5	0.9	20.1	21.1	2.1	26.5	27.1	26.7	27.0	27.3	28.1	
6900.00	22.1	-31.4	-8.5	-10.4	1.5	0.9	20.2	21.1	2.1	26.6	26.6	26.7	26.9	27.4	28.2	
7000.00	22.1	-31.7	-8.3	-10.5	1.6	0.9	20.2	21.1	2.1	26.1	26.2	26.3	26.6	27.0	27.4	
7100.00	22.0	-31.9	-8.6	-11.0	1.6	0.9	20.1	21.0	2.2	26.6	26.4	26.7	27.0	27.3	28.1	
7200.00	22.0	-32.4	-8.3	-11.1	1.7	0.9	20.1	21.0	2.2	26.0	26.5	26.5	26.8	27.1	28.1	
7300.00	21.9	-32.6	-8.6	-11.8	1.8	0.9	20.0	20.9	2.3	25.8	25.9	26.1	26.3	26.7	27.7	
7400.00	21.8	-33.4	-8.3	-12.0	1.9	1.0	20.1	20.9	2.3	25.7	25.8	26.1	26.4	26.8	27.8	
7500.00	21.6	-33.6	-8.5	-12.9	2.0	1.0	19.8	20.6	2.4	25.8	25.6	26.0	26.4	26.8	28.0	
7600.00	21.4	-34.4	-8.0	-13.1	2.2	1.0	19.7	20.4	2.5	26.2	26.0	26.2	26.5	26.9	27.4	
7700.00	21.0	-34.7	-8.1	-14.4	2.3	1.0	19.6	20.2	2.6	25.1	24.7	25.2	25.6	25.9	26.8	
7800.00	20.6	-36.0	-7.4	-14.6	2.7	1.1	19.5	20.1	2.7	25.8	25.7	25.9	26.2	26.6	27.2	
7900.00	20.2	-36.3	-7.4	-15.9	2.9	1.1	19.2	19.9	2.8	26.0	25.5	25.9	26.2	26.6	27.8	
8000.00	19.6	-37.7	-6.5	-15.4	3.4	1.2	19.0	19.6	2.9	24.9	24.8	25.1	25.5	26.1	26.8	
8100.00	19.0	-38.1	-6.2	-15.7	3.7	1.2	18.7	19.2	3.0	24.4	25.0	25.3	25.6	26.1	26.8	
8200.00	18.0	-40.1	-5.3	-14.0	4.7	1.2	18.3	18.8	3.3	24.2	24.6	25.1	25.8	26.4	26.5	
8300.00	17.4	-40.2	-5.0	-13.3	4.9	1.3	17.9	18.4	3.4	24.7	24.8	24.8	25.4	26.0	26.7	
8400.00	16.0	-42.5	-4.3	-11.2	6.6	1.3	17.3	17.8	3.6	24.5	24.9	25.3	25.9	26.5	27.2	
8500.00	15.2	-43.0	-3.9	-10.3	7.1	1.3	16.7	17.2	3.8	23.9	23.9	24.4	25.1	25.9	24.4	

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
5500.0	37.6	37.6	37.5	37.3	37.2	37.0	37.0
6000.0	34.8	34.7	34.5	34.3	34.1	33.9	33.8
7000.0	44.4	44.3	44.2	44.0	43.8	43.7	43.7
8000.0	52.6	52.5	52.2	52.1	51.9	51.8	51.9
8500.0	60.5	60.4	60.2	60.0	59.8	59.9	60.3



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +6.0$ V, $V_{EN} = 0$ V, $I_{DD} = 4$ mA, $I_{EN} = 0$ mA @ Temperature = $+85^\circ\text{C}$

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)
					K	Measure	
200.00	-3.8	-3.9	-4.0	-9.2	1.1	0.9	3.7
300.00	-2.4	-2.5	-6.6	-12.0	1.0	0.7	2.4
400.00	-1.8	-1.9	-9.3	-14.1	1.0	0.6	2.1
500.00	-1.5	-1.5	-12.0	-15.7	1.0	0.5	2.0
600.00	-1.3	-1.4	-14.9	-16.9	1.0	0.5	1.4
700.00	-1.2	-1.3	-18.1	-17.7	1.0	0.5	1.4
800.00	-1.2	-1.3	-22.0	-17.8	1.0	0.4	1.6
900.00	-1.2	-1.3	-26.8	-17.6	1.0	0.4	1.4
1000.00	-1.2	-1.3	-30.1	-17.2	1.0	0.4	1.3
1100.00	-1.2	-1.3	-26.4	-16.9	1.0	0.4	1.4
1200.00	-1.2	-1.3	-22.9	-16.6	1.0	0.4	1.5
1300.00	-1.2	-1.3	-20.5	-16.2	1.0	0.4	1.3
1400.00	-1.2	-1.4	-18.7	-15.8	1.0	0.4	1.4
1500.00	-1.3	-1.4	-17.3	-15.5	1.0	0.5	1.8
1600.00	-1.3	-1.4	-16.2	-15.3	1.0	0.5	1.7
1700.00	-1.3	-1.5	-15.4	-15.3	1.0	0.5	1.4
1800.00	-1.4	-1.5	-14.7	-15.2	1.0	0.5	1.6
1900.00	-1.4	-1.6	-14.2	-15.1	1.0	0.5	1.7
2000.00	-1.4	-1.6	-13.7	-15.0	1.0	0.5	2.0
2100.00	-1.5	-1.7	-13.5	-15.2	1.0	0.5	1.8
2200.00	-1.5	-1.7	-13.2	-15.4	1.0	0.5	1.9
2300.00	-1.5	-1.8	-13.1	-15.6	1.0	0.6	1.9
2400.00	-1.5	-1.8	-13.0	-15.9	1.0	0.6	2.0
2500.00	-1.6	-1.9	-13.0	-16.3	1.1	0.6	2.1
2600.00	-1.6	-1.9	-13.0	-16.9	1.1	0.6	2.1
2700.00	-1.6	-2.0	-13.1	-17.6	1.1	0.6	2.3
2800.00	-1.6	-2.0	-13.2	-18.3	1.1	0.6	2.0
2900.00	-1.6	-2.1	-13.4	-19.1	1.1	0.6	2.3
3000.00	-1.7	-2.1	-13.5	-20.2	1.1	0.7	2.2
3100.00	-1.7	-2.1	-13.6	-21.6	1.1	0.7	2.3
3200.00	-1.7	-2.1	-13.7	-23.2	1.1	0.7	2.3
3300.00	-1.7	-2.1	-13.8	-24.8	1.1	0.7	2.1
3400.00	-1.7	-2.1	-13.8	-26.3	1.1	0.7	2.4
3500.00	-1.7	-2.1	-13.8	-27.2	1.1	0.7	2.2
3600.00	-1.7	-2.1	-13.8	-25.8	1.1	0.7	2.2
3700.00	-1.7	-2.1	-13.7	-23.7	1.1	0.7	2.1
3800.00	-1.8	-2.1	-13.5	-21.7	1.1	0.7	2.4
3900.00	-1.8	-2.1	-13.3	-20.1	1.1	0.7	2.4
4000.00	-1.8	-2.1	-13.1	-18.6	1.1	0.7	2.1
4100.00	-1.8	-2.2	-12.8	-17.3	1.1	0.7	2.2
4200.00	-1.8	-2.2	-12.5	-16.2	1.1	0.6	2.1
4300.00	-1.9	-2.2	-12.3	-15.4	1.1	0.6	2.2
4400.00	-1.9	-2.2	-12.0	-14.7	1.1	0.6	1.9
4500.00	-1.9	-2.3	-11.7	-14.0	1.1	0.6	2.3
4600.00	-1.9	-2.3	-11.5	-13.4	1.1	0.6	2.0
4700.00	-1.9	-2.3	-11.4	-13.0	1.1	0.6	2.4
4800.00	-1.9	-2.4	-11.3	-12.7	1.1	0.6	2.0
4900.00	-2.0	-2.4	-11.2	-12.4	1.1	0.6	2.4
5000.00	-2.0	-2.4	-11.0	-12.1	1.1	0.6	2.2
5100.00	-1.9	-2.4	-11.0	-11.9	1.1	0.6	1.9
5200.00	-2.0	-2.5	-10.9	-11.7	1.1	0.6	2.1
5300.00	-1.9	-2.5	-11.0	-11.7	1.1	0.6	1.9
5400.00	-2.0	-2.5	-11.0	-11.6	1.1	0.6	1.9
5500.00	-1.9	-2.5	-11.0	-11.4	1.1	0.6	2.0
5600.00	-1.9	-2.5	-11.2	-11.5	1.1	0.6	1.9
5700.00	-1.9	-2.5	-11.3	-11.6	1.1	0.6	2.0
5800.00	-1.9	-2.4	-11.5	-11.5	1.1	0.6	1.7
5900.00	-1.8	-2.4	-11.8	-11.8	1.1	0.6	1.4
6000.00	-1.8	-2.4	-11.9	-11.7	1.1	0.6	2.0
6100.00	-1.8	-2.4	-12.3	-11.9	1.1	0.6	2.1
6200.00	-1.8	-2.4	-12.7	-12.2	1.1	0.6	1.7
6300.00	-1.7	-2.4	-12.9	-12.2	1.1	0.6	1.7
6400.00	-1.7	-2.4	-13.3	-12.5	1.1	0.6	1.7
6500.00	-1.7	-2.4	-13.6	-12.6	1.1	0.6	1.6
6600.00	-1.7	-2.4	-13.8	-12.7	1.1	0.6	1.8
6700.00	-1.6	-2.4	-14.3	-13.0	1.1	0.6	2.1
6800.00	-1.7	-2.4	-14.6	-13.1	1.1	0.6	1.9
6900.00	-1.6	-2.4	-14.6	-13.1	1.1	0.6	1.6
7000.00	-1.7	-2.4	-14.8	-13.3	1.1	0.6	1.8
7100.00	-1.7	-2.4	-14.7	-13.3	1.1	0.6	1.9
7200.00	-1.7	-2.4	-14.6	-13.3	1.1	0.6	2.0
7300.00	-1.8	-2.5	-14.4	-13.1	1.1	0.6	2.2
7400.00	-1.9	-2.6	-13.9	-12.7	1.1	0.6	1.5
7500.00	-1.9	-2.6	-13.4	-12.5	1.1	0.6	1.5
7600.00	-2.0	-2.7	-13.0	-12.2	1.2	0.7	1.7
7700.00	-2.1	-2.8	-12.1	-11.6	1.2	0.7	1.7
7800.00	-2.2	-2.9	-11.6	-11.2	1.2	0.7	2.6
7900.00	-2.4	-3.1	-11.0	-10.6	1.2	0.7	2.1
8000.00	-2.5	-3.1	-10.1	-9.9	1.2	0.7	2.0

TEST CONDITIONS: $V_{DD} = +6.0$ V, $V_{EN} = 0$ V, $I_{DD} = 4$ mA, $I_{EN} = 0$ mA @ Temperature = +85°C

FREQ (MHz)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
400.0	29.8	28.6	26.6	23.5	18.5	15.0	14.2
1000.0	31.7	30.7	28.7	25.3	19.3	14.4	15.5
2000.0	33.4	32.8	31.5	29.2	25.2	18.4	16.2
4000.0	34.2	33.9	33.1	31.8	29.3	25.1	19.6
6000.0	35.1	34.6	33.7	32.1	29.0	23.3	17.1
8000.0	35.7	35.3	34.3	32.6	29.5	23.5	17.0

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	70.6	69.8	68.2	64.9	56.6	46.3	45.8
1000.0	71.1	71.0	70.6	68.2	58.5	52.9	51.9
2000.0	70.8	70.5	70.0	69.1	66.3	57.4	51.0
4000.0	72.6	72.7	72.7	73.0	73.5	73.6	54.1
6000.0	72.6	72.5	72.3	71.9	70.9	65.6	56.5
8000.0	83.4	83.2	83.1	82.8	81.8	78.4	67.3

FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
400.0	11.8	8.9
1000.0	11.4	9.3
2000.0	13.1	10.8
4000.0	15.3	12.7
6000.0	15.7	12.7
8000.0	15.6	12.2



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IF/RF MICROWAVE COMPONENTS

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +6.0 V, V_{EN} = 0 V, I_{DD} = 4 mA, I_{EN} = 0 mA @ Temperature = +85°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)	FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
					K	Measure				
5500.00	-1.7	-2.4	-19.8	-17.3	1.1	0.7	2.9	5500.0	14.5	11.5
5600.00	-1.7	-2.4	-20.3	-17.2	1.1	0.7	2.7	6000.0	15.1	12.2
5700.00	-1.7	-2.4	-20.2	-16.9	1.1	0.7	2.9	7000.0	16.6	13.1
5800.00	-1.7	-2.4	-19.7	-16.3	1.1	0.7	2.8	8000.0	17.4	12.0
5900.00	-1.7	-2.5	-18.8	-15.7	1.1	0.7	2.7	8500.0	16.2	10.8
6000.00	-1.7	-2.5	-18.1	-15.1	1.1	0.7	2.8			
6100.00	-1.7	-2.5	-17.0	-14.4	1.1	0.7	2.7			
6200.00	-1.7	-2.5	-16.2	-13.8	1.1	0.7	2.7			
6300.00	-1.8	-2.6	-15.2	-13.2	1.1	0.7	2.9			
6400.00	-1.8	-2.6	-14.5	-12.7	1.1	0.7	2.9			
6500.00	-1.8	-2.7	-13.7	-12.1	1.1	0.7	3.0			
6600.00	-1.9	-2.7	-13.0	-11.6	1.1	0.7	2.7			
6700.00	-1.9	-2.8	-12.2	-11.0	1.1	0.7	2.9			
6800.00	-2.0	-2.9	-11.6	-10.6	1.1	0.7	2.9			
6900.00	-2.0	-2.9	-11.0	-10.1	1.1	0.7	3.0			
7000.00	-2.1	-3.0	-10.4	-9.7	1.1	0.7	3.0			
7100.00	-2.2	-3.1	-9.8	-9.2	1.1	0.7	3.2			
7200.00	-2.3	-3.2	-9.3	-8.8	1.1	0.7	3.2			
7300.00	-2.5	-3.3	-8.7	-8.3	1.1	0.6	3.0			
7400.00	-2.6	-3.5	-8.3	-8.0	1.1	0.6	3.3			
7500.00	-2.7	-3.6	-7.8	-7.6	1.2	0.6	3.8			
7600.00	-2.9	-3.7	-7.4	-7.2	1.2	0.6	3.4			
7700.00	-3.1	-3.9	-6.9	-6.8	1.2	0.6	3.3			
7800.00	-3.2	-4.1	-6.5	-6.5	1.2	0.6	2.8			
7900.00	-3.5	-4.3	-6.1	-6.1	1.2	0.6	3.9			
8000.00	-3.6	-4.4	-5.8	-5.8	1.2	0.6	3.9			
8100.00	-3.9	-4.6	-5.3	-5.4	1.2	0.6	3.8			
8200.00	-4.1	-4.8	-5.1	-5.2	1.2	0.6	3.7			
8300.00	-4.3	-5.1	-4.7	-4.9	1.2	0.6	4.0			
8400.00	-4.5	-5.3	-4.5	-4.7	1.2	0.6	4.1			
8500.00	-4.7	-5.4	-4.2	-4.4	1.2	0.6	3.9			

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
5500.0	70.9	70.8	70.7	70.4	69.3	65.1	58.4	36.0	35.8	34.9	34.4	31.9	28.0	21.4
6000.0	75.8	75.8	75.7	75.5	75.0	73.4	66.7	36.6	36.4	35.7	33.7	30.8	25.3	17.3
7000.0	86.3	86.2	86.0	85.6	84.6	81.7	71.5	36.5	36.7	36.2	33.1	30.4	26.1	20.3
8000.0	83.5	83.5	83.4	83.1	82.6	80.6	73.1	36.2	35.9	35.3	35.0	33.0	29.3	22.1
8500.0	92.6	92.7	92.8	92.7	91.8	90.2	108.3	35.9	35.1	33.6	30.8	25.9	17.1	15.6



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +6.25 V, V_{EN} = +6.25 V, I_{DD} = 105 mA, I_{EN} = 2.69 mA @ Temperature = + 85°C

FREQ (GHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure										
200.00	15.0	-33.3	-1.9	-4.8	1.5	1.0	20.3	22.2	5.3	31.2	34.0	33.9	33.0	33.3	33.2	32.8
300.00	19.9	-28.3	-5.9	-9.0	1.2	0.8	21.1	22.7	2.9	30.8	33.2	34.0	34.6	34.3	34.2	34.2
400.00	21.3	-26.8	-12.3	-15.1	1.2	0.7	21.9	23.2	2.2	32.7	34.4	34.2	35.6	35.5	35.6	35.2
500.00	21.7	-26.5	-17.9	-18.2	1.2	0.7	22.3	23.3	1.9	33.1	35.2	35.2	35.7	36.1	35.3	35.3
600.00	21.7	-26.5	-18.1	-17.2	1.1	0.7	22.6	23.5	1.7	32.7	34.5	36.6	36.5	36.3	36.2	36.2
700.00	21.7	-26.6	-16.4	-16.2	1.1	0.7	22.8	23.6	1.6	32.2	35.2	36.2	36.0	36.2	35.9	35.8
800.00	21.7	-26.5	-15.4	-15.8	1.1	0.6	22.9	23.7	1.6	33.9	34.1	36.5	35.4	35.7	35.6	35.5
900.00	21.7	-26.6	-15.0	-15.7	1.1	0.7	23.0	23.8	1.6	34.0	34.8	36.0	36.5	35.9	35.9	35.8
1000.00	21.7	-26.6	-14.8	-15.8	1.1	0.7	23.1	23.8	1.6	35.3	35.1	36.3	36.1	36.4	36.4	36.3
1100.00	21.7	-26.7	-14.8	-16.2	1.1	0.7	23.1	23.8	1.6	34.2	34.6	36.6	35.9	35.8	35.8	35.8
1200.00	21.8	-26.7	-15.0	-16.8	1.1	0.7	23.1	23.9	1.6	33.7	34.7	34.9	35.9	35.6	35.5	35.3
1300.00	21.8	-26.7	-15.2	-17.6	1.2	0.7	23.2	24.0	1.6	34.8	34.5	35.7	34.9	35.0	35.0	34.9
1400.00	21.8	-26.7	-15.6	-18.6	1.2	0.7	23.1	23.9	1.6	34.1	33.7	35.7	35.1	35.5	35.5	35.5
1500.00	21.8	-26.8	-15.9	-19.9	1.2	0.7	23.0	24.0	1.6	32.4	34.1	34.6	34.2	34.3	34.4	34.1
1600.00	21.8	-26.9	-16.0	-21.4	1.2	0.7	23.1	24.0	1.7	33.6	33.2	34.9	34.6	34.8	34.7	34.7
1700.00	21.8	-26.9	-16.0	-22.7	1.2	0.7	23.1	24.1	1.7	34.7	33.8	33.7	33.9	34.3	34.1	34.1
1800.00	21.9	-26.9	-16.2	-24.8	1.2	0.7	23.0	24.1	1.7	32.4	33.6	33.5	33.9	34.0	34.1	34.1
1900.00	21.9	-27.0	-16.1	-26.6	1.2	0.7	22.9	24.0	1.8	32.1	34.2	33.0	33.4	33.1	33.3	33.1
2000.00	21.9	-27.0	-15.8	-26.9	1.2	0.7	22.7	23.9	1.8	32.6	33.9	33.3	33.8	33.9	33.6	33.6
2100.00	21.9	-27.1	-15.4	-25.8	1.2	0.7	22.9	24.1	1.8	34.0	32.8	33.0	33.2	33.3	33.6	33.3
2200.00	21.9	-27.2	-14.9	-23.9	1.2	0.7	22.8	24.0	1.9	34.2	32.9	33.0	33.6	33.9	34.0	33.8
2300.00	21.9	-27.3	-14.3	-21.8	1.2	0.7	22.8	24.2	1.8	32.1	33.0	33.0	33.3	33.4	33.3	33.3
2400.00	21.9	-27.3	-13.7	-20.1	1.2	0.7	22.4	24.1	1.9	31.9	32.7	32.5	32.3	32.2	32.3	32.0
2500.00	21.8	-27.5	-13.2	-18.8	1.2	0.8	22.2	24.1	1.9	31.1	32.4	31.7	32.1	32.3	32.1	32.1
2600.00	21.8	-27.6	-12.7	-17.7	1.2	0.8	22.0	23.9	1.9	31.1	31.8	32.2	32.2	32.0	32.0	31.8
2700.00	21.8	-27.7	-12.2	-16.8	1.2	0.8	21.8	23.7	2.0	31.5	31.6	32.6	32.2	32.5	32.4	32.3
2800.00	21.8	-27.8	-11.8	-16.0	1.2	0.8	21.7	23.5	1.9	31.2	31.2	32.1	31.8	31.9	31.9	31.8
2900.00	21.7	-27.9	-11.3	-15.2	1.2	0.8	21.4	23.3	2.0	29.7	30.9	31.0	31.1	31.0	30.8	30.8
3000.00	21.7	-28.0	-10.9	-14.6	1.2	0.8	21.4	23.3	2.0	30.8	31.3	30.6	31.0	31.0	30.9	30.8
3100.00	21.7	-28.0	-10.5	-14.1	1.2	0.8	21.2	23.3	2.0	30.9	31.8	30.6	30.4	30.5	30.4	30.3
3200.00	21.7	-28.0	-10.2	-13.8	1.2	0.8	21.4	23.4	2.0	29.8	31.4	30.9	30.8	30.7	30.8	30.7
3300.00	21.7	-28.1	-10.1	-13.6	1.2	0.8	21.2	23.3	2.0	30.4	31.5	31.0	30.7	30.7	30.6	30.6
3400.00	21.7	-28.1	-9.9	-13.4	1.2	0.8	21.1	23.1	2.0	30.0	30.5	30.8	31.1	31.1	31.0	31.0
3500.00	21.7	-28.2	-9.8	-13.4	1.2	0.8	21.1	23.2	2.1	30.3	30.8	30.1	30.2	30.3	30.2	30.2
3600.00	21.7	-28.2	-9.8	-13.6	1.2	0.8	21.1	23.0	2.0	30.1	30.4	30.1	30.2	30.2	30.2	30.2
3700.00	21.8	-28.3	-9.8	-13.7	1.2	0.8	21.5	23.3	2.0	30.4	30.7	31.0	31.1	31.1	31.3	31.4
3800.00	21.8	-28.3	-9.9	-13.9	1.2	0.8	21.5	23.3	2.0	29.7	30.4	30.0	30.1	30.3	30.3	30.3
3900.00	21.8	-28.3	-10.0	-14.2	1.2	0.8	21.5	23.3	1.9	29.6	30.2	29.7	30.4	30.4	30.6	30.6
4000.00	21.9	-28.3	-10.1	-14.6	1.2	0.8	21.4	23.3	1.9	30.4	30.2	30.5	30.5	30.5	30.9	31.0
4100.00	21.9	-28.3	-10.4	-15.2	1.2	0.8	21.4	23.4	1.9	30.6	29.8	30.0	30.2	30.3	30.5	30.5
4200.00	22.0	-28.4	-10.6	-15.8	1.2	0.8	21.5	23.4	1.9	30.4	29.6	29.7	30.0	30.3	30.4	30.5
4300.00	22.1	-28.4	-10.9	-16.2	1.2	0.8	21.3	23.2	1.9	29.1	29.8	30.3	30.1	30.5	30.7	30.7
4400.00	22.1	-28.4	-11.4	-17.0	1.2	0.8	21.3	23.2	1.8	29.0	29.5	29.8	30.0	30.2	30.3	30.4
4500.00	22.2	-28.4	-11.7	-17.8	1.2	0.8	21.0	23.0	1.9	28.6	29.8	29.7	30.0	30.0	30.1	30.3
4600.00	22.2	-28.5	-12.3	-18.6	1.3	0.8	20.7	22.9	1.9	30.2	30.1	29.5	29.8	29.9	30.0	30.1
4700.00	22.3	-28.5	-12.8	-19.6	1.3	0.8	20.8	22.9	1.8	28.8	29.1	29.1	29.3	29.5	29.7	29.8
4800.00	22.4	-28.6	-13.2	-20.0	1.3	0.8	21.1	23.1	1.9	29.1	29.5	29.4	29.5	29.9	30.1	30.3
4900.00	22.4	-28.7	-14.0	-20.9	1.3	0.8	20.8	22.8	2.0	29.1	28.7	29.2	29.2	29.5	29.6	29.6
5000.00	22.4	-28.7	-14.4	-22.0	1.3	0.8	20.7	22.6	1.9	28.2	28.3	28.8	28.7	29.0	29.1	29.2
5100.00	22.5	-28.8	-14.7	-22.2	1.3	0.8	21.1	22.8	2.0	28.1	28.9	28.4	28.6	28.8	29.1	29.2
5200.00	22.5	-28.9	-15.4	-23.0	1.3	0.8	21.2	22.9	1.9	27.9	28.6	28.3	28.7	28.9	29.2	29.5
5300.00	22.6	-28.9	-15.2	-22.6	1.3	0.8	20.8	22.6	1.9	27.5	29.0	28.2	28.5	28.8	29.1	29.2
5400.00	22.6	-29.1	-15.3	-22.3	1.3	0.8	20.3	22.3	1.9	28.4	29.0	28.5	28.6	28.8	29.0	29.1
5500.00	22.6	-29.1	-15.4	-23.2	1.3	0.8	19.9	22.1	1.9	27.7	28.0	27.7	27.9	28.1	28.3	28.3
5600.00	22.7	-29.2	-14.1	-21.4	1.3	0.8	19.4	21.6	1.9	27.4	28.2	27.9	28.1	28.2	28.3	28.3
5700.00	22.5	-29.5	-13.8	-20.6	1.4	0.8	19.3	21.3	2.0	27.2	28.0	26.9	27.1	27.3	27.3	27.3
5800.00	22.6	-29.4	-13.0	-20.4	1.3	0.8	19.3	21.0	2.0	26.7	27.0	27.0	27.0	27.1	27.2	27.2
5900.00	22.5	-29.8	-11.5	-18.3	1.4	0.9	19.3	20.9	2.0	26.4	26.9	27.0	27.1	27.2	27.3	27.3
6000.00	22.4	-29.9	-11.3	-18.2	1.4	0.9	19.1	20.5	2.0	26.7	26.9	26.6	26.8	26.9	26.8	26.8
6100.00	22.5	-30.0	-10.1	-16.7	1.4	0.9	19.3	20.4	2.2	26.1	26.7	26.7	26.9	27.1	27.2	27.3
6200.00	22.2	-30.5	-9.0	-15.1	1.4	0.9	19.2	20.2	2.1	26.5	26.0	26.7	26.7	26.8	26.9	27.0
6300.00	22.1	-30.5	-8.6	-14.7	1.4	0.9	19.2	20.1	2.1	25.8	26.1	26.0	26.1	26.2	26.4	26.5
6400.00	22.1	-30.9	-7.5	-13.2	1.4											

TEST CONDITIONS: $V_{DD} = +6.25$ V, $V_{EN} = +6.25$ V, $I_{DD} = 105$ mA, $I_{EN} = 2.69$ mA @ Temperature = + 85°C

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	47.3	47.2	47.1	47.1	46.9	46.8	46.5
1000.0	45.8	45.7	45.6	45.5	45.3	45.1	44.8
2000.0	43.0	42.7	42.7	42.5	42.4	42.3	42.3
4000.0	43.8	43.7	43.6	43.7	43.4	43.3	43.4
6000.0	34.0	33.8	33.7	33.5	33.3	33.2	33.1
8000.0	39.1	38.8	38.6	38.6	39.0	40.2	42.4



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IF/RF MICROWAVE COMPONENTS



Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +6.25\text{ V}$, $V_{EN} = +6.25\text{ V}$, $I_{DD} = 111\text{ mA}$, $I_{EN} = 2.69\text{ mA}$ @ Temperature = $+85^\circ\text{C}$

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure (dBm)										
5500.00	21.7	-29.7	-8.8	-8.9	1.3	0.8	19.7	21.8	2.0	27.8	28.7	28.8	28.9	29.1	29.2	
5600.00	21.8	-29.9	-8.6	-8.9	1.3	0.8	19.4	21.5	2.0	27.0	27.1	27.4	27.6	27.9	27.8	
5700.00	21.8	-29.9	-8.9	-9.1	1.4	0.8	19.2	21.3	2.0	27.6	27.1	27.5	27.7	27.9	28.0	
5800.00	21.9	-30.0	-8.6	-9.1	1.4	0.8	19.2	21.2	2.0	26.4	27.0	27.5	27.5	27.7	27.9	
5900.00	21.9	-30.0	-8.9	-9.3	1.4	0.8	19.0	20.8	2.0	26.7	27.3	27.0	27.2	27.4	27.6	
6000.00	22.0	-30.1	-8.5	-9.2	1.4	0.8	18.9	20.4	2.0	25.6	26.0	25.9	26.0	26.3	26.4	
6100.00	22.0	-30.1	-8.8	-9.4	1.4	0.8	19.4	20.7	2.0	26.4	26.8	26.7	26.8	27.0	27.3	
6200.00	22.1	-30.2	-8.4	-9.3	1.4	0.8	19.5	20.6	2.0	26.2	26.0	26.1	26.5	26.7	26.9	
6300.00	22.1	-30.3	-8.6	-9.5	1.4	0.8	19.9	20.9	2.0	26.9	26.7	27.1	27.1	27.5	28.1	
6400.00	22.2	-30.5	-8.3	-9.4	1.4	0.8	20.0	21.0	2.0	26.4	26.8	26.9	27.1	27.4	28.0	
6500.00	22.2	-30.6	-8.5	-9.7	1.4	0.8	20.0	20.9	2.1	26.5	26.5	26.9	27.2	27.5	28.1	
6600.00	22.2	-30.9	-8.3	-9.7	1.4	0.8	20.2	21.1	2.0	26.4	26.8	26.9	27.1	27.5	28.2	
6700.00	22.2	-31.0	-8.5	-10.0	1.4	0.8	20.2	21.0	2.1	26.3	26.7	26.7	27.0	27.3	28.2	
6800.00	22.3	-31.2	-8.3	-10.0	1.5	0.9	20.2	21.1	2.1	27.0	27.1	26.9	27.2	27.5	28.4	
6900.00	22.2	-31.4	-8.5	-10.4	1.5	0.9	20.3	21.2	2.1	26.5	26.4	26.9	27.2	27.6	28.5	
7000.00	22.2	-31.8	-8.2	-10.4	1.6	0.9	20.3	21.1	2.1	26.3	26.0	26.7	26.8	27.2	28.1	
7100.00	22.1	-31.9	-8.5	-10.9	1.6	0.9	20.2	21.0	2.2	26.5	26.7	26.8	27.1	27.5	28.5	
7200.00	22.1	-32.4	-8.3	-11.0	1.7	0.9	20.3	21.1	2.2	26.6	26.4	26.8	26.9	27.4	28.4	
7300.00	22.0	-32.6	-8.5	-11.6	1.7	0.9	20.1	20.9	2.3	25.8	26.1	26.3	26.7	27.0	28.1	
7400.00	21.9	-33.4	-8.2	-11.8	1.9	1.0	20.2	20.9	2.3	25.8	25.7	26.4	26.7	27.1	28.1	
7500.00	21.7	-33.5	-8.4	-12.7	2.0	1.0	20.0	20.7	2.4	25.7	26.2	26.2	26.6	27.1	28.2	
7600.00	21.5	-34.7	-8.0	-12.9	2.2	1.0	19.8	20.4	2.5	26.4	26.5	26.5	26.7	27.2	28.2	
7700.00	21.1	-34.8	-8.0	-14.2	2.3	1.0	19.6	20.2	2.6	24.9	25.2	25.4	25.7	26.2	26.7	
7800.00	20.8	-36.0	-7.4	-14.4	2.7	1.1	19.5	20.1	2.7	25.6	25.6	26.1	26.3	26.9	27.5	
7900.00	20.3	-36.5	-7.3	-15.8	2.9	1.1	19.3	19.9	2.8	25.6	25.3	25.9	26.3	26.8	28.0	
8000.00	19.7	-38.1	-6.4	-15.4	3.5	1.2	19.0	19.6	2.9	25.0	24.8	25.3	25.8	26.4	27.1	
8100.00	19.1	-38.3	-6.2	-15.9	3.8	1.2	18.7	19.2	3.0	24.8	25.2	25.5	25.9	26.3	27.0	
8200.00	18.1	-40.5	-5.3	-14.2	4.9	1.2	18.3	18.7	3.2	24.3	25.1	25.4	26.1	26.7	26.6	
8300.00	17.4	-40.6	-5.0	-13.5	5.1	1.3	17.9	18.3	3.4	24.5	25.0	25.3	25.6	26.3	27.0	
8400.00	16.1	-42.8	-4.3	-11.4	6.7	1.3	17.3	17.8	3.6	25.2	24.7	25.6	26.0	26.7	27.2	
8500.00	15.2	-43.1	-3.9	-10.4	7.1	1.3	16.7	17.1	3.8	24.0	24.2	24.6	25.3	26.1	26.2	

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
5500.0	37.5	37.5	37.4	37.3	37.2	37.2	37.2
6000.0	34.6	34.5	34.4	34.2	34.0	34.0	33.9
7000.0	44.3	44.1	44.1	44.0	43.8	43.8	43.9
8000.0	52.4	52.4	52.2	52.2	52.0	52.0	52.2
8500.0	60.4	60.3	60.2	60.0	59.9	60.1	60.4



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +6.25$ V, $V_{EN} = 0$ V, $I_{DD} = 4$ mA, $I_{EN} = 0$ mA @ Temperature = +85°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)
					K	Measure	
200.00	-3.8	-3.9	-4.0	-9.2	1.1	0.9	3.5
300.00	-2.4	-2.5	-6.6	-12.0	1.0	0.7	2.3
400.00	-1.8	-1.9	-9.3	-14.1	1.0	0.6	2.1
500.00	-1.5	-1.5	-12.0	-15.7	1.0	0.5	2.0
600.00	-1.3	-1.4	-14.9	-16.9	1.0	0.5	1.4
700.00	-1.2	-1.3	-18.1	-17.7	1.0	0.5	1.5
800.00	-1.2	-1.3	-22.0	-17.8	1.0	0.4	1.7
900.00	-1.2	-1.3	-26.8	-17.6	1.0	0.4	1.5
1000.00	-1.2	-1.3	-30.0	-17.2	1.0	0.4	1.4
1100.00	-1.2	-1.3	-26.4	-16.9	1.0	0.4	1.4
1200.00	-1.2	-1.3	-22.9	-16.7	1.0	0.4	1.3
1300.00	-1.2	-1.3	-20.5	-16.2	1.0	0.4	1.3
1400.00	-1.2	-1.3	-18.7	-15.8	1.0	0.4	1.5
1500.00	-1.3	-1.4	-17.3	-15.5	1.0	0.5	1.5
1600.00	-1.3	-1.4	-16.2	-15.4	1.0	0.5	1.6
1700.00	-1.3	-1.5	-15.4	-15.3	1.0	0.5	1.7
1800.00	-1.4	-1.5	-14.7	-15.2	1.0	0.5	1.6
1900.00	-1.4	-1.6	-14.2	-15.1	1.0	0.5	1.6
2000.00	-1.4	-1.6	-13.7	-15.0	1.0	0.5	1.9
2100.00	-1.5	-1.7	-13.5	-15.1	1.0	0.5	1.6
2200.00	-1.5	-1.7	-13.2	-15.4	1.0	0.5	2.0
2300.00	-1.5	-1.8	-13.1	-15.6	1.0	0.6	1.9
2400.00	-1.5	-1.8	-13.0	-15.9	1.0	0.6	2.1
2500.00	-1.6	-1.9	-13.0	-16.3	1.0	0.6	2.1
2600.00	-1.6	-1.9	-13.0	-16.9	1.1	0.6	2.2
2700.00	-1.6	-2.0	-13.1	-17.6	1.1	0.6	2.3
2800.00	-1.6	-2.0	-13.2	-18.3	1.1	0.6	2.3
2900.00	-1.7	-2.1	-13.4	-19.1	1.1	0.6	2.3
3000.00	-1.7	-2.1	-13.5	-20.2	1.1	0.7	2.3
3100.00	-1.7	-2.1	-13.6	-21.6	1.1	0.7	2.4
3200.00	-1.7	-2.1	-13.7	-23.2	1.1	0.7	2.2
3300.00	-1.7	-2.1	-13.8	-24.8	1.1	0.7	2.2
3400.00	-1.7	-2.1	-13.8	-26.4	1.1	0.7	2.3
3500.00	-1.7	-2.1	-13.8	-27.2	1.1	0.7	2.3
3600.00	-1.7	-2.1	-13.8	-25.8	1.1	0.7	2.1
3700.00	-1.7	-2.1	-13.7	-23.6	1.1	0.7	2.1
3800.00	-1.8	-2.1	-13.5	-21.7	1.1	0.7	2.2
3900.00	-1.8	-2.1	-13.3	-20.2	1.1	0.7	2.3
4000.00	-1.8	-2.1	-13.1	-18.7	1.1	0.7	2.1
4100.00	-1.8	-2.2	-12.8	-17.3	1.1	0.7	2.2
4200.00	-1.8	-2.2	-12.5	-16.2	1.1	0.6	2.0
4300.00	-1.9	-2.2	-12.2	-15.4	1.1	0.6	2.0
4400.00	-1.9	-2.2	-12.0	-14.7	1.1	0.6	2.1
4500.00	-1.9	-2.3	-11.8	-14.0	1.1	0.6	2.3
4600.00	-1.9	-2.3	-11.5	-13.4	1.1	0.6	2.4
4700.00	-1.9	-2.3	-11.4	-13.0	1.1	0.6	2.5
4800.00	-1.9	-2.4	-11.2	-12.7	1.1	0.6	1.9
4900.00	-2.0	-2.4	-11.2	-12.4	1.1	0.6	1.7
5000.00	-1.9	-2.4	-11.0	-12.1	1.1	0.6	2.0
5100.00	-1.9	-2.4	-11.0	-11.9	1.1	0.6	2.3
5200.00	-1.9	-2.4	-10.9	-11.7	1.1	0.6	1.7
5300.00	-1.9	-2.5	-11.0	-11.7	1.1	0.6	1.8
5400.00	-1.9	-2.5	-11.0	-11.6	1.1	0.6	1.8
5500.00	-1.9	-2.5	-11.0	-11.4	1.1	0.6	2.1
5600.00	-1.9	-2.5	-11.2	-11.5	1.1	0.6	1.8
5700.00	-1.9	-2.5	-11.3	-11.6	1.1	0.6	1.9
5800.00	-1.8	-2.4	-11.5	-11.5	1.1	0.6	1.7
5900.00	-1.8	-2.4	-11.8	-11.7	1.1	0.6	1.5
6000.00	-1.8	-2.4	-11.9	-11.7	1.1	0.6	1.5
6100.00	-1.7	-2.4	-12.3	-11.9	1.1	0.6	1.5
6200.00	-1.8	-2.4	-12.7	-12.2	1.1	0.6	1.6
6300.00	-1.7	-2.4	-12.9	-12.2	1.1	0.6	1.7
6400.00	-1.7	-2.4	-13.3	-12.5	1.1	0.6	1.9
6500.00	-1.7	-2.4	-13.6	-12.6	1.1	0.6	1.5
6600.00	-1.6	-2.4	-13.8	-12.7	1.1	0.6	1.5
6700.00	-1.6	-2.4	-14.3	-13.0	1.1	0.6	1.7
6800.00	-1.7	-2.4	-14.5	-13.1	1.1	0.6	1.7
6900.00	-1.6	-2.4	-14.6	-13.1	1.1	0.6	2.1
7000.00	-1.6	-2.4	-14.8	-13.3	1.1	0.6	1.7
7100.00	-1.7	-2.4	-14.7	-13.3	1.1	0.6	1.6
7200.00	-1.7	-2.4	-14.6	-13.3	1.1	0.6	1.6
7300.00	-1.8	-2.5	-14.4	-13.1	1.1	0.6	2.2
7400.00	-1.8	-2.6	-13.9	-12.7	1.1	0.6	1.5
7500.00	-1.9	-2.6	-13.3	-12.5	1.1	0.6	1.5
7600.00	-2.0	-2.7	-12.9	-12.2	1.2	0.7	2.0
7700.00	-2.1	-2.8	-12.1	-11.6	1.2	0.7	2.0
7800.00	-2.2	-2.9	-11.6	-11.2	1.2	0.7	1.9
7900.00	-2.4	-3.1	-11.0	-10.6	1.2	0.7	1.8
8000.00	-2.4	-3.1	-10.1	-9.9	1.2	0.7	1.5

TEST CONDITIONS: $V_{DD} = +6.25$ V, $V_{EN} = 0$ V, $I_{DD} = 4$ mA, $I_{EN} = 0$ mA @ Temperature = $+85^\circ\text{C}$

FREQ (MHz)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
400.0	29.4	28.2	26.3	23.2	18.2	14.9	14.0
1000.0	31.4	30.3	28.3	25.0	19.0	14.4	15.4
2000.0	32.9	32.3	31.1	28.8	24.9	18.2	16.2
4000.0	34.1	33.4	32.6	31.3	29.0	24.7	19.2
6000.0	34.7	34.3	33.4	31.7	28.6	22.7	16.9
8000.0	35.7	35.0	34.1	32.1	29.1	22.9	16.8

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	70.5	69.7	68.0	64.6	55.5	46.0	45.6
1000.0	71.1	71.1	70.5	67.9	58.0	53.1	51.8
2000.0	70.8	70.4	69.9	68.9	65.9	57.0	50.6
4000.0	72.9	72.9	72.9	73.2	73.8	74.1	52.6
6000.0	73.0	72.8	72.5	72.1	70.9	65.3	56.3
8000.0	83.3	83.2	83.1	82.7	81.7	78.0	66.9

FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
400.0	11.8	8.9
1000.0	11.4	9.3
2000.0	13.1	10.7
4000.0	15.1	12.6
6000.0	15.5	12.5
8000.0	15.4	12.0



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IF/RF MICROWAVE COMPONENTS

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +6.25 V, V_{EN} = 0 V, I_{DD} = 4 mA, I_{EN} = 0 mA @ Temperature = +85°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)	FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
					K	Measure				
5500.00	-1.7	-2.4	-20.0	-17.4	1.1	0.7	2.9	5500.0	14.3	11.4
5600.00	-1.7	-2.4	-20.4	-17.2	1.1	0.7	2.6	6000.0	14.9	12.0
5700.00	-1.7	-2.4	-20.3	-17.0	1.1	0.7	2.8	7000.0	16.4	12.9
5800.00	-1.7	-2.4	-19.8	-16.3	1.1	0.7	2.9	8000.0	17.2	11.9
5900.00	-1.7	-2.4	-18.9	-15.8	1.1	0.7	3.0	8500.0	16.0	10.6
6000.00	-1.7	-2.5	-18.1	-15.2	1.1	0.7	2.7			
6100.00	-1.7	-2.5	-17.0	-14.5	1.1	0.7	2.6			
6200.00	-1.7	-2.5	-16.2	-13.9	1.1	0.7	2.7			
6300.00	-1.7	-2.6	-15.2	-13.2	1.1	0.7	3.0			
6400.00	-1.8	-2.6	-14.5	-12.7	1.1	0.7	2.6			
6500.00	-1.8	-2.7	-13.7	-12.1	1.1	0.7	3.2			
6600.00	-1.9	-2.7	-13.0	-11.6	1.1	0.7	2.7			
6700.00	-1.9	-2.8	-12.2	-11.0	1.1	0.7	2.9			
6800.00	-2.0	-2.8	-11.6	-10.6	1.1	0.7	3.1			
6900.00	-2.0	-2.9	-11.0	-10.1	1.1	0.7	3.0			
7000.00	-2.1	-3.0	-10.4	-9.7	1.1	0.7	3.3			
7100.00	-2.2	-3.1	-9.8	-9.2	1.1	0.6	2.7			
7200.00	-2.3	-3.2	-9.3	-8.8	1.1	0.6	3.4			
7300.00	-2.5	-3.3	-8.7	-8.3	1.1	0.6	3.2			
7400.00	-2.6	-3.4	-8.3	-8.0	1.1	0.6	3.4			
7500.00	-2.7	-3.6	-7.8	-7.5	1.2	0.6	3.2			
7600.00	-2.9	-3.7	-7.4	-7.2	1.2	0.6	3.5			
7700.00	-3.1	-3.9	-6.9	-6.7	1.2	0.6	3.5			
7800.00	-3.2	-4.1	-6.5	-6.5	1.2	0.6	3.0			
7900.00	-3.4	-4.3	-6.1	-6.1	1.2	0.6	3.8			
8000.00	-3.6	-4.4	-5.8	-5.8	1.2	0.6	4.3			
8100.00	-3.8	-4.6	-5.3	-5.4	1.2	0.6	3.9			
8200.00	-4.1	-4.8	-5.1	-5.2	1.2	0.6	3.7			
8300.00	-4.3	-5.0	-4.7	-4.8	1.2	0.6	4.3			
8400.00	-4.5	-5.3	-4.5	-4.7	1.2	0.6	4.0			
8500.00	-4.7	-5.4	-4.2	-4.4	1.2	0.6	4.2			

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
5500.0	71.1	71.0	71.0	70.7	69.5	64.9	57.9	35.2	34.9	34.2	33.6	31.3	27.4	20.8
6000.0	76.2	76.0	75.9	75.6	75.0	73.2	65.9	36.2	35.9	35.1	33.1	30.1	24.5	17.0
7000.0	86.4	86.2	85.9	85.5	84.5	81.2	69.8	36.5	36.2	35.5	32.5	29.8	25.5	19.9
8000.0	83.5	83.4	83.3	83.1	82.4	80.3	72.8	36.1	35.8	34.8	34.4	32.2	28.6	20.9
8500.0	92.7	92.7	92.8	92.7	91.5	91.5	102.4	35.8	34.8	33.0	30.2	25.3	16.7	15.5



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +4.75 V, V_{EN} = +4.75 V, I_{DD} = 68 mA, I_{EN} = 2.04 mA @ Temperature = + 105°C

FREQ (GHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure										
200.00	14.2	-32.3	-1.9	-4.8	1.5	1.0	18.6	20.2	5.7	29.5	29.4	29.2	29.5	29.5	29.2	29.1
300.00	18.9	-27.5	-5.6	-8.9	1.2	0.8	18.9	20.3	3.2	29.9	29.7	30.3	30.3	30.1	29.9	29.9
400.00	20.4	-26.2	-11.0	-15.1	1.2	0.7	19.4	20.7	2.4	29.5	32.0	30.8	31.4	31.5	31.2	31.0
500.00	20.8	-25.6	-16.8	-21.0	1.1	0.7	19.7	20.8	2.1	29.8	31.0	31.3	31.6	31.5	31.2	31.0
600.00	20.9	-25.6	-20.0	-21.9	1.1	0.7	20.0	20.9	1.9	30.1	31.3	32.3	32.2	32.2	32.1	31.8
700.00	20.9	-25.6	-19.6	-20.8	1.1	0.7	20.1	21.1	1.8	31.1	31.9	31.5	31.9	31.6	31.6	31.3
800.00	21.0	-25.6	-18.6	-20.3	1.1	0.7	20.2	21.1	1.8	31.4	31.7	31.6	31.3	31.2	30.9	30.9
900.00	21.0	-25.6	-17.7	-20.2	1.1	0.7	20.3	21.3	1.8	31.1	31.4	31.6	31.4	31.3	31.2	31.2
1000.00	21.0	-25.7	-17.2	-20.5	1.1	0.7	20.4	21.3	1.8	31.1	31.6	32.0	32.0	32.1	31.8	31.7
1100.00	20.9	-25.7	-16.9	-21.2	1.1	0.7	20.3	21.2	1.8	32.3	32.2	31.6	31.5	31.4	31.2	31.2
1200.00	20.9	-25.8	-16.6	-22.4	1.1	0.7	20.4	21.4	1.8	31.7	31.6	31.3	31.4	31.1	30.9	30.9
1300.00	21.0	-25.8	-16.3	-24.0	1.2	0.7	20.4	21.4	1.8	31.5	30.8	30.5	30.7	30.7	30.6	30.5
1400.00	20.9	-25.8	-16.1	-26.0	1.2	0.7	20.3	21.3	1.8	31.7	31.2	31.4	31.2	31.1	31.0	31.0
1500.00	20.9	-26.0	-15.7	-28.5	1.2	0.7	20.3	21.5	1.9	30.3	29.6	30.1	30.0	29.9	29.8	29.6
1600.00	20.9	-26.0	-15.1	-30.6	1.2	0.7	20.3	21.5	1.9	30.1	30.7	30.4	30.6	30.5	30.4	30.2
1700.00	20.9	-26.1	-14.6	-29.0	1.2	0.7	20.4	21.6	1.9	30.6	30.0	29.8	30.1	29.9	29.8	29.7
1800.00	20.9	-26.1	-14.2	-26.2	1.2	0.7	20.2	21.5	1.9	30.1	30.0	30.0	29.8	29.8	29.7	29.6
1900.00	20.9	-26.3	-13.6	-23.4	1.2	0.7	20.1	21.5	2.0	29.7	30.2	29.1	29.0	28.9	28.7	28.6
2000.00	20.9	-26.3	-13.0	-21.1	1.2	0.8	19.9	21.4	2.0	29.5	29.3	29.4	29.5	29.3	29.1	29.0
2100.00	20.8	-26.5	-12.5	-19.4	1.2	0.8	20.0	21.6	2.1	29.0	29.2	29.1	29.0	28.9	28.8	28.8
2200.00	20.8	-26.5	-11.9	-18.1	1.2	0.8	19.8	21.5	2.1	29.5	30.3	30.1	29.7	29.6	29.5	29.3
2300.00	20.8	-26.6	-11.4	-16.8	1.2	0.8	19.8	21.6	2.1	29.5	29.7	29.2	29.2	29.0	28.8	28.8
2400.00	20.7	-26.8	-10.9	-15.7	1.2	0.8	19.6	21.7	2.1	28.3	28.7	28.0	27.9	27.8	27.6	27.5
2500.00	20.7	-26.9	-10.5	-14.9	1.2	0.8	19.5	21.7	2.2	28.0	28.3	27.8	27.9	27.7	27.6	27.4
2600.00	20.6	-27.1	-10.2	-14.2	1.2	0.8	19.3	21.7	2.2	27.1	27.2	27.7	27.6	27.5	27.3	27.1
2700.00	20.6	-27.2	-9.8	-13.6	1.2	0.8	18.9	21.3	2.3	28.7	28.1	28.4	28.1	28.0	27.8	27.6
2800.00	20.5	-27.3	-9.5	-13.0	1.3	0.8	18.9	21.2	2.3	27.4	27.7	27.8	27.6	27.5	27.3	27.1
2900.00	20.5	-27.4	-9.2	-12.5	1.3	0.8	18.6	21.1	2.4	27.1	26.7	26.6	26.4	26.2	26.2	25.9
3000.00	20.4	-27.5	-9.0	-12.1	1.3	0.8	18.8	21.3	2.5	26.5	26.9	26.8	26.6	26.3	26.1	26.1
3100.00	20.4	-27.5	-8.7	-11.8	1.3	0.8	18.6	21.5	2.4	26.6	27.0	26.3	26.3	26.1	25.9	25.6
3200.00	20.4	-27.6	-8.6	-11.5	1.3	0.8	18.6	21.4	2.4	27.6	27.2	26.7	26.7	26.5	26.3	26.0
3300.00	20.4	-27.7	-8.5	-11.4	1.3	0.8	18.4	21.2	2.4	26.2	27.0	26.7	26.5	26.3	26.1	25.9
3400.00	20.4	-27.7	-8.4	-11.3	1.3	0.8	18.3	21.1	2.4	27.7	26.7	27.1	27.0	26.9	26.6	26.4
3500.00	20.4	-27.8	-8.4	-11.3	1.3	0.8	18.4	21.3	2.4	26.7	26.5	26.4	26.2	26.1	25.8	25.7
3600.00	20.5	-27.8	-8.4	-11.4	1.3	0.8	18.4	21.4	2.3	26.3	26.1	26.3	26.2	26.0	25.8	25.6
3700.00	20.5	-27.8	-8.4	-11.5	1.3	0.8	18.7	21.5	2.4	27.2	27.1	27.5	27.3	27.2	27.0	26.7
3800.00	20.5	-27.9	-8.6	-11.7	1.3	0.8	18.7	21.5	2.3	26.4	26.8	26.4	26.2	26.1	25.8	25.6
3900.00	20.6	-27.9	-8.8	-12.0	1.3	0.8	18.8	21.6	2.3	26.5	26.9	26.5	26.5	26.3	26.1	25.8
4000.00	20.6	-27.9	-9.0	-12.3	1.3	0.8	18.7	21.7	2.3	28.5	26.8	27.0	26.8	26.5	26.2	26.2
4100.00	20.7	-28.0	-9.3	-12.7	1.3	0.8	18.8	21.8	2.3	26.5	26.2	26.6	26.5	26.3	26.0	25.7
4200.00	20.8	-27.9	-9.5	-13.2	1.3	0.8	18.8	21.7	2.3	26.3	26.6	26.4	26.4	26.3	26.0	25.7
4300.00	20.8	-28.0	-9.8	-13.6	1.3	0.8	18.6	21.7	2.3	27.1	26.4	26.7	26.5	26.4	26.2	25.9
4400.00	20.9	-28.1	-10.3	-14.2	1.3	0.8	18.6	21.7	2.3	26.6	26.5	26.6	26.2	26.0	25.8	25.5
4500.00	21.0	-28.0	-10.7	-14.7	1.3	0.8	18.3	21.7	2.3	26.2	26.4	26.3	26.1	26.0	25.6	25.3
4600.00	21.0	-28.1	-11.2	-15.2	1.3	0.8	18.0	21.5	2.3	25.6	26.4	25.9	25.9	25.8	25.4	25.1
4700.00	21.1	-28.1	-11.7	-15.9	1.3	0.8	18.1	21.5	2.3	26.2	27.0	25.8	25.8	25.5	25.2	24.8
4800.00	21.1	-28.2	-12.0	-16.2	1.3	0.8	18.4	21.4	2.3	26.5	26.5	26.4	26.3	26.1	25.8	25.5
4900.00	21.1	-28.4	-12.7	-16.7	1.4	0.8	18.3	21.4	2.3	25.9	26.2	25.7	25.7	25.4	25.1	24.7
5000.00	21.2	-28.3	-13.0	-17.3	1.4	0.8	18.3	21.3	2.3	25.9	25.8	25.6	25.3	25.1	24.8	24.5
5100.00	21.3	-28.4	-13.1	-17.5	1.4	0.8	18.7	21.3	2.3	26.4	26.2	26.4	25.4	25.2	24.9	24.7
5200.00	21.2	-28.5	-13.6	-17.8	1.4	0.8	18.7	21.2	2.3	25.6	26.1	25.8	25.7	25.5	25.3	25.1
5300.00	21.3	-28.6	-13.3	-17.8	1.4	0.8	18.2	21.2	2.3	25.9	26.6	25.7	25.5	25.2	25.0	24.8
5400.00	21.3	-28.9	-13.2	-17.4	1.4	0.9	17.5	21.0	2.3	25.9	26.0	25.5	25.3	25.1	24.8	24.6
5500.00	21.3	-28.8	-13.2	-17.8	1.4	0.9	17.0	20.7	2.3	24.8	25.7	24.7	24.4	24.1	23.8	23.7
5600.00	21.3	-29.0	-12.2	-17.1	1.4	0.9	16.5	20.2	2.3	25.4	25.4	24.9	24.6	24.2	23.7	23.5
5700.00	21.1	-29.3	-11.8	-16.4	1.5	0.9	16.5	19.9	2.4	24.4	25.7	24.0	23.7	23.2	22.7	22.7
5800.00	21.2	-29.3	-11.2	-16.4	1.4	0.9	16.7	19.5	2.4	24.4	24.8	24.0	23.7	23.2	22.7	22.8
5900.00	21.1	-29.6	-10.1	-15.1	1.5	0.9	16.9	19.2	2.4	24.6	24.4	24.3	24.0	23.6	23.0	23.1
6000.00	20.9	-29.7	-9.9	-14.9	1.5	0.9	16.9	18.8	2.5	24.5	24.5	24.0	23.7	23.2	22.7	22.7
6100.00	21.0	-29.9	-9.4	-14.2	1.5	0.9	17.0	18.7	2.6	25.0	24.6	24.3	24.1	23.7	23.2	23.2
6200.00	20.7	-30.4	-8.1	-13.0	1.5	1.0	17.1	18.6	2.6	24.2	23.7	24.1	23.8	23.4	23.0	22.9
6300.00	20.6	-30.4	-7.7	-12.7	1.5	1.0	17.0	18.4	2.6	23.6	24.1	23.5	23.2	22.8	22.5	22.7
6400.00	20.5	-30.9	-6.9	-11.7	1.6	1.0	17.0									

TEST CONDITIONS: $V_{DD} = +4.75$ V, $V_{EN} = +4.75$ V, $I_{DD} = 68$ mA, $I_{EN} = 2.04$ mA @ Temperature = + 105°C

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	38.4	38.3	38.3	38.2	38.0	37.7	37.5
1000.0	37.6	37.5	37.5	37.4	37.2	36.9	36.5
2000.0	37.4	37.0	36.8	36.6	36.3	35.9	35.6
4000.0	43.2	43.1	42.9	42.7	42.3	42.1	42.0
6000.0	32.8	32.6	32.4	31.9	31.6	31.2	31.0
8000.0	36.8	36.3	36.0	36.2	37.2	39.3	41.9

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +4.75 V, V_{EN} = +4.75 V, I_{DD} = 74 mA, I_{EN} = 2.02 mA @ Temperature = +105°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure (dBm)										
5500.00	20.5	-29.7	-8.7	-8.0	1.4	0.8	16.7	20.6	2.2	26.2	26.0	26.1	25.9	25.6	25.3	24.8
5600.00	20.6	-29.8	-8.5	-8.1	1.4	0.8	16.3	20.3	2.1	25.0	24.9	24.7	24.5	24.2	23.7	23.3
5700.00	20.6	-29.8	-8.8	-8.3	1.4	0.8	16.1	20.0	2.1	25.2	25.8	25.1	24.8	24.5	24.0	23.5
5800.00	20.7	-29.8	-8.5	-8.3	1.4	0.8	16.3	19.7	2.1	25.2	25.2	25.1	24.9	24.6	24.1	23.6
5900.00	20.7	-29.9	-8.7	-8.6	1.5	0.8	16.3	19.3	2.1	24.8	25.3	25.0	24.6	24.3	23.8	23.3
6000.00	20.8	-29.8	-8.4	-8.6	1.4	0.8	16.5	19.0	2.1	24.2	23.8	23.7	23.4	23.0	22.4	22.4
6100.00	20.9	-29.9	-8.7	-8.9	1.5	0.8	17.1	19.1	2.1	24.8	24.9	24.7	24.5	24.2	23.8	23.5
6200.00	21.0	-30.1	-8.4	-8.9	1.5	0.8	17.3	19.1	2.1	24.4	24.6	24.3	24.1	23.8	23.4	23.3
6300.00	20.9	-30.1	-8.6	-9.3	1.5	0.8	17.6	19.2	2.1	25.6	25.5	25.3	25.2	25.0	24.8	24.6
6400.00	21.0	-30.4	-8.3	-9.3	1.5	0.8	17.8	19.3	2.2	25.5	25.6	25.2	25.1	24.9	24.7	24.6
6500.00	21.0	-30.3	-8.5	-9.7	1.5	0.8	17.9	19.2	2.2	25.8	25.5	25.3	25.3	25.1	24.9	24.8
6600.00	21.1	-30.6	-8.3	-9.7	1.5	0.9	18.1	19.4	2.2	25.4	25.5	25.5	25.3	25.2	25.0	24.9
6700.00	21.0	-30.7	-8.6	-10.2	1.6	0.9	18.0	19.3	2.2	25.3	25.6	25.3	25.3	25.1	25.0	24.9
6800.00	21.1	-31.1	-8.4	-10.3	1.6	0.9	18.2	19.4	2.2	25.9	26.1	25.8	25.7	25.5	25.4	25.4
6900.00	21.0	-31.1	-8.6	-10.8	1.6	0.9	18.3	19.4	2.2	26.1	26.3	26.0	25.9	25.8	25.8	25.8
7000.00	21.0	-31.4	-8.4	-10.9	1.7	0.9	18.3	19.4	2.3	26.2	25.8	25.6	25.6	25.4	25.4	25.4
7100.00	20.9	-31.5	-8.7	-11.5	1.7	0.9	18.3	19.4	2.3	26.3	26.6	26.1	26.0	25.8	25.8	25.8
7200.00	20.9	-32.0	-8.5	-11.7	1.8	1.0	18.3	19.4	2.4	26.4	25.7	26.0	26.0	25.9	25.9	26.0
7300.00	20.8	-32.2	-8.7	-12.4	1.9	1.0	18.2	19.3	2.4	25.9	25.6	25.6	25.4	25.5	25.5	25.6
7400.00	20.7	-32.6	-8.4	-12.7	2.0	1.0	18.3	19.3	2.5	25.9	25.7	25.6	25.6	25.6	25.8	25.8
7500.00	20.4	-32.9	-8.6	-13.6	2.1	1.0	18.0	19.0	2.5	26.3	26.0	25.9	25.8	25.8	25.9	26.0
7600.00	20.3	-33.7	-8.2	-13.8	2.3	1.0	17.9	18.9	2.6	26.3	26.1	26.0	25.8	25.8	25.8	25.8
7700.00	19.9	-33.8	-8.3	-14.9	2.4	1.1	17.9	18.8	2.7	24.8	24.8	24.6	24.6	24.6	24.7	24.7
7800.00	19.6	-34.8	-7.7	-14.8	2.7	1.1	17.7	18.5	2.8	25.9	26.2	25.9	25.7	25.7	25.7	25.8
7900.00	19.1	-35.1	-7.6	-15.6	2.9	1.1	17.4	18.3	2.9	25.9	25.4	25.9	25.8	25.8	25.9	25.9
8000.00	18.5	-36.4	-6.8	-14.7	3.4	1.2	17.1	18.0	3.1	25.1	25.3	25.2	25.2	25.2	25.3	25.3
8100.00	17.9	-36.7	-6.5	-14.7	3.6	1.2	17.0	17.8	3.2	25.7	25.4	25.5	25.2	25.2	25.3	25.1
8200.00	17.1	-38.3	-5.6	-13.1	4.3	1.2	16.6	17.4	3.4	25.4	24.9	24.6	24.5	24.4	23.7	23.7
8300.00	16.4	-38.5	-5.3	-12.3	4.6	1.2	16.3	17.1	3.5	25.5	25.1	25.0	25.0	24.9	24.8	24.2
8400.00	15.1	-40.3	-4.5	-10.6	5.7	1.2	15.8	16.7	3.7	26.7	25.4	25.6	25.4	25.3	25.0	24.2
8500.00	14.3	-40.8	-4.2	-9.7	6.2	1.2	15.3	16.1	4.0	25.1	24.6	24.4	24.1	23.8	23.1	21.0

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)
5500.0	35.5	35.4	35.1	34.9	34.6	34.2	33.9
6000.0	33.9	33.7	33.4	33.1	32.7	32.3	32.0
7000.0	44.0	43.8	43.6	43.3	43.0	42.7	42.7
8000.0	51.9	51.8	51.5	51.2	50.8	50.5	50.6
8500.0	59.8	59.5	59.2	58.8	58.5	58.5	59.2



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +4.75$ V, $V_{EN} = 0$ V, $I_{DD} = 3$ mA, $I_{EN} = 0$ mA @ Temperature = $+105^\circ\text{C}$

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)
					K	Measure	
200.00	-3.8	-3.9	-4.0	-9.1	1.1	0.9	3.9
300.00	-2.4	-2.5	-6.7	-11.9	1.0	0.7	2.6
400.00	-1.8	-1.8	-9.4	-14.0	1.0	0.6	2.1
500.00	-1.5	-1.5	-12.1	-15.8	1.0	0.5	1.6
600.00	-1.3	-1.4	-15.0	-17.0	1.0	0.5	1.5
700.00	-1.2	-1.3	-18.2	-17.8	1.0	0.5	1.6
800.00	-1.2	-1.3	-22.2	-18.0	1.0	0.4	1.4
900.00	-1.2	-1.3	-27.4	-17.7	1.0	0.4	1.4
1000.00	-1.1	-1.3	-30.9	-17.4	1.0	0.4	1.5
1100.00	-1.1	-1.3	-26.6	-17.1	1.0	0.4	1.6
1200.00	-1.2	-1.3	-23.0	-16.8	1.0	0.4	1.4
1300.00	-1.2	-1.3	-20.6	-16.4	1.0	0.4	1.4
1400.00	-1.2	-1.3	-18.8	-15.9	1.0	0.4	1.3
1500.00	-1.2	-1.4	-17.4	-15.6	1.0	0.5	1.6
1600.00	-1.3	-1.4	-16.3	-15.4	1.0	0.5	1.6
1700.00	-1.3	-1.5	-15.4	-15.4	1.0	0.5	1.6
1800.00	-1.4	-1.5	-14.7	-15.3	1.0	0.5	1.6
1900.00	-1.4	-1.6	-14.2	-15.1	1.0	0.5	1.9
2000.00	-1.4	-1.6	-13.8	-15.0	1.0	0.5	1.9
2100.00	-1.5	-1.7	-13.5	-15.2	1.0	0.5	1.7
2200.00	-1.5	-1.7	-13.3	-15.4	1.0	0.5	1.9
2300.00	-1.5	-1.8	-13.1	-15.6	1.0	0.6	2.0
2400.00	-1.5	-1.8	-13.0	-15.8	1.0	0.6	2.1
2500.00	-1.6	-1.9	-13.0	-16.2	1.1	0.6	2.1
2600.00	-1.6	-1.9	-13.1	-16.8	1.1	0.6	2.2
2700.00	-1.6	-2.0	-13.1	-17.5	1.1	0.6	2.3
2800.00	-1.6	-2.0	-13.3	-18.2	1.1	0.6	2.4
2900.00	-1.6	-2.0	-13.4	-19.0	1.1	0.6	2.2
3000.00	-1.7	-2.1	-13.6	-20.1	1.1	0.6	2.2
3100.00	-1.7	-2.1	-13.7	-21.5	1.1	0.6	2.5
3200.00	-1.7	-2.1	-13.8	-23.3	1.1	0.7	2.2
3300.00	-1.7	-2.1	-13.9	-24.9	1.1	0.7	2.2
3400.00	-1.7	-2.1	-14.0	-26.7	1.1	0.7	2.4
3500.00	-1.7	-2.1	-14.0	-27.7	1.1	0.7	2.5
3600.00	-1.7	-2.1	-13.9	-26.2	1.1	0.7	2.3
3700.00	-1.7	-2.1	-13.8	-23.9	1.1	0.7	2.2
3800.00	-1.7	-2.1	-13.6	-21.9	1.1	0.7	2.4
3900.00	-1.8	-2.1	-13.4	-20.2	1.1	0.7	2.5
4000.00	-1.8	-2.1	-13.1	-18.7	1.1	0.7	2.5
4100.00	-1.8	-2.2	-12.8	-17.3	1.1	0.7	2.1
4200.00	-1.8	-2.2	-12.5	-16.2	1.1	0.6	2.6
4300.00	-1.8	-2.2	-12.3	-15.4	1.1	0.6	2.1
4400.00	-1.9	-2.2	-12.0	-14.7	1.1	0.6	2.0
4500.00	-1.9	-2.3	-11.8	-14.0	1.1	0.6	2.4
4600.00	-1.9	-2.3	-11.6	-13.5	1.1	0.6	2.4
4700.00	-1.9	-2.3	-11.4	-13.0	1.1	0.6	2.0
4800.00	-1.9	-2.4	-11.3	-12.7	1.1	0.6	2.2
4900.00	-1.9	-2.4	-11.2	-12.5	1.1	0.6	2.6
5000.00	-1.9	-2.4	-11.1	-12.1	1.1	0.6	2.6
5100.00	-1.9	-2.4	-11.1	-12.0	1.1	0.6	2.2
5200.00	-1.9	-2.4	-11.0	-11.8	1.1	0.6	2.3
5300.00	-1.9	-2.4	-11.0	-11.8	1.1	0.6	1.9
5400.00	-1.9	-2.5	-11.1	-11.7	1.1	0.6	2.3
5500.00	-1.9	-2.5	-11.1	-11.5	1.1	0.6	2.0
5600.00	-1.9	-2.5	-11.3	-11.7	1.1	0.6	2.1
5700.00	-1.9	-2.5	-11.4	-11.7	1.1	0.6	1.8
5800.00	-1.8	-2.4	-11.6	-11.7	1.1	0.6	1.9
5900.00	-1.8	-2.4	-11.9	-11.9	1.1	0.6	2.0
6000.00	-1.8	-2.4	-12.0	-11.9	1.1	0.6	1.7
6100.00	-1.7	-2.4	-12.4	-12.1	1.1	0.6	2.4
6200.00	-1.8	-2.4	-12.8	-12.4	1.1	0.6	1.8
6300.00	-1.7	-2.4	-13.0	-12.4	1.1	0.6	2.3
6400.00	-1.7	-2.4	-13.5	-12.7	1.1	0.6	2.5
6500.00	-1.7	-2.4	-13.8	-12.8	1.1	0.6	2.4
6600.00	-1.6	-2.4	-14.0	-12.9	1.1	0.6	2.7
6700.00	-1.6	-2.4	-14.6	-13.3	1.1	0.6	2.5
6800.00	-1.7	-2.4	-14.8	-13.4	1.1	0.6	2.8
6900.00	-1.6	-2.4	-14.9	-13.4	1.1	0.6	2.7
7000.00	-1.7	-2.4	-15.2	-13.6	1.1	0.6	2.7
7100.00	-1.7	-2.4	-15.1	-13.6	1.1	0.6	2.6
7200.00	-1.7	-2.4	-15.0	-13.6	1.1	0.6	2.9
7300.00	-1.8	-2.5	-14.8	-13.5	1.1	0.6	3.0
7400.00	-1.8	-2.6	-14.2	-13.1	1.1	0.6	3.1
7500.00	-1.9	-2.6	-13.7	-12.9	1.1	0.6	2.8
7600.00	-2.0	-2.7	-13.2	-12.5	1.2	0.7	2.8
7700.00	-2.1	-2.8	-12.4	-11.8	1.2	0.7	2.9
7800.00	-2.2	-2.9	-11.8	-11.4	1.2	0.7	2.4
7900.00	-2.4	-3.1	-11.2	-10.8	1.2	0.7	3.5
8000.00	-2.4	-3.1	-10.2	-10.1	1.2	0.7	3.1

TEST CONDITIONS: $V_{DD} = +4.75$ V, $V_{EN} = 0$ V, $I_{DD} = 3$ mA, $I_{EN} = 0$ mA @ Temperature = $+105^\circ\text{C}$

FREQ (MHz)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
400.0	29.8	28.4	26.3	23.2	18.2	14.8	14.0
1000.0	32.0	30.7	28.7	25.3	19.5	14.4	15.5
2000.0	33.7	32.9	31.5	29.2	25.4	18.5	16.2
4000.0	34.2	33.9	33.1	31.8	29.4	25.3	19.5
6000.0	35.3	34.9	33.9	32.1	29.1	23.7	17.3
8000.0	36.1	35.5	34.4	32.5	29.5	23.4	16.9

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	71.2	70.9	69.2	65.7	56.5	46.2	45.8
1000.0	71.7	71.8	71.6	69.7	60.2	53.1	51.5
2000.0	72.0	71.6	71.2	70.3	67.6	58.8	51.2
4000.0	73.2	73.2	73.3	73.8	74.8	73.5	54.4
6000.0	72.5	72.3	71.9	71.4	70.2	65.5	56.5
8000.0	83.4	83.3	83.1	82.8	81.7	78.4	67.8

FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
400.0	11.6	8.8
1000.0	11.2	9.2
2000.0	13.1	10.6
4000.0	15.1	12.5
6000.0	15.7	12.6
8000.0	15.6	12.1



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +4.75 V, V_{EN} = 0 V, I_{DD} = 3 mA, I_{EN} = 0 mA @ Temperature = +105°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)	FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
					K	Measure				
5500.00	-1.7	-2.4	-20.4	-17.5	1.1	0.7	3.0	5500.0	14.5	11.6
5600.00	-1.7	-2.4	-20.9	-17.3	1.1	0.7	2.8	6000.0	15.0	12.2
5700.00	-1.7	-2.4	-20.7	-17.0	1.1	0.7	3.0	7000.0	16.6	13.1
5800.00	-1.7	-2.4	-20.1	-16.4	1.1	0.7	3.0	8000.0	17.4	12.1
5900.00	-1.7	-2.5	-19.2	-15.9	1.1	0.7	3.0	8500.0	16.2	10.8
6000.00	-1.7	-2.5	-18.4	-15.3	1.1	0.7	2.9			
6100.00	-1.7	-2.5	-17.2	-14.6	1.1	0.7	2.9			
6200.00	-1.7	-2.5	-16.4	-14.0	1.1	0.7	2.9			
6300.00	-1.7	-2.6	-15.3	-13.3	1.1	0.7	2.9			
6400.00	-1.8	-2.6	-14.6	-12.8	1.1	0.7	2.8			
6500.00	-1.8	-2.7	-13.7	-12.2	1.1	0.7	2.9			
6600.00	-1.8	-2.7	-13.1	-11.7	1.1	0.7	2.8			
6700.00	-1.9	-2.8	-12.3	-11.1	1.1	0.7	3.1			
6800.00	-2.0	-2.9	-11.7	-10.7	1.1	0.7	3.1			
6900.00	-2.0	-2.9	-11.0	-10.2	1.1	0.7	2.6			
7000.00	-2.1	-3.0	-10.5	-9.8	1.1	0.7	3.3			
7100.00	-2.2	-3.1	-9.9	-9.3	1.1	0.7	3.3			
7200.00	-2.3	-3.2	-9.4	-8.9	1.1	0.7	3.3			
7300.00	-2.4	-3.3	-8.9	-8.5	1.1	0.7	3.2			
7400.00	-2.5	-3.4	-8.4	-8.1	1.2	0.6	3.2			
7500.00	-2.7	-3.6	-7.9	-7.7	1.2	0.6	3.7			
7600.00	-2.8	-3.7	-7.5	-7.3	1.2	0.6	3.4			
7700.00	-3.0	-3.9	-7.0	-6.9	1.2	0.6	3.6			
7800.00	-3.2	-4.1	-6.6	-6.6	1.2	0.6	4.0			
7900.00	-3.4	-4.3	-6.2	-6.2	1.2	0.6	3.9			
8000.00	-3.6	-4.4	-5.9	-5.9	1.2	0.6	4.1			
8100.00	-3.8	-4.7	-5.4	-5.5	1.2	0.6	4.3			
8200.00	-4.0	-4.8	-5.2	-5.3	1.2	0.6	4.0			
8300.00	-4.3	-5.1	-4.8	-4.9	1.2	0.6	4.0			
8400.00	-4.5	-5.3	-4.6	-4.8	1.2	0.6	4.5			
8500.00	-4.7	-5.4	-4.2	-4.5	1.2	0.6	4.0			

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
5500.0	70.4	70.4	70.2	69.9	68.5	64.4	58.7	37.5	36.8	35.6	34.9	32.7	29.2	23.2
6000.0	75.2	75.2	75.1	74.9	74.5	73.0	67.5	37.5	37.2	36.3	34.2	31.5	26.7	18.0
7000.0	86.1	86.0	85.8	85.4	84.7	82.2	74.2	37.7	37.4	36.8	33.9	31.4	27.5	21.7
8000.0	83.7	83.7	83.6	83.3	82.7	80.9	73.9	37.3	37.0	35.9	35.6	33.6	30.3	24.2
8500.0	93.7	93.7	93.9	93.8	93.3	90.2	94.6	36.1	35.5	34.1	31.4	27.0	18.1	15.6



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IF/RF MICROWAVE COMPONENTS



REV. OR

TSY-83LN+

3/26/2024

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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +5.0$ V, $V_{EN} = +5.0$ V, $I_{DD} = 73$ mA, $I_{EN} = 2.15$ mA @ Temperature = + 105°C

FREQ (GHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure (dBm)										
200.00	14.4	-32.6	-1.9	-4.8	1.5	1.0	19.1	20.7	5.7	30.2	30.6	30.4	30.4	30.4	30.5	
300.00	19.1	-27.8	-5.7	-8.9	1.2	0.9	19.4	20.8	3.2	30.7	32.2	31.1	30.9	31.3	31.1	
400.00	20.6	-26.4	-11.3	-15.1	1.2	0.7	19.9	21.2	2.5	31.9	33.2	31.9	32.0	32.2	32.6	
500.00	21.0	-25.9	-17.3	-20.6	1.2	0.7	20.2	21.2	2.1	31.7	32.0	32.3	32.2	31.7	32.7	
600.00	21.1	-25.7	-20.0	-20.8	1.1	0.7	20.5	21.4	2.0	32.2	32.9	33.3	33.1	32.8	33.5	
700.00	21.1	-25.8	-19.1	-19.7	1.1	0.7	20.7	21.5	1.8	32.4	32.9	33.2	32.5	33.1	33.6	
800.00	21.1	-25.8	-18.0	-19.1	1.1	0.7	20.8	21.6	1.8	33.0	33.2	32.3	32.3	32.4	33.3	
900.00	21.1	-25.8	-17.3	-19.0	1.1	0.7	20.8	21.7	1.9	32.2	33.1	32.7	32.3	32.8	32.7	
1000.00	21.1	-25.9	-16.8	-19.3	1.1	0.7	20.9	21.7	1.9	33.0	33.3	32.7	32.9	33.1	33.4	
1100.00	21.1	-25.9	-16.6	-19.9	1.1	0.7	20.8	21.7	1.8	34.4	33.1	32.3	32.4	32.6	32.9	
1200.00	21.1	-26.0	-16.5	-20.9	1.2	0.7	20.9	21.8	1.9	32.9	32.9	32.0	32.2	32.2	32.6	
1300.00	21.1	-26.0	-16.3	-22.3	1.2	0.7	20.9	21.9	1.9	32.1	32.4	32.1	31.5	31.4	32.0	
1400.00	21.1	-26.0	-16.2	-23.9	1.2	0.7	20.8	21.8	1.9	31.7	32.2	32.2	31.6	32.4	32.2	
1500.00	21.1	-26.1	-15.9	-26.3	1.2	0.7	20.7	21.9	1.9	30.9	31.7	31.0	30.8	30.1	31.0	
1600.00	21.1	-26.2	-15.5	-28.9	1.2	0.7	20.8	21.9	1.9	31.7	31.9	31.4	31.0	31.5	31.2	
1700.00	21.1	-26.3	-15.1	-29.2	1.2	0.7	20.9	22.1	2.0	31.6	31.0	30.8	30.6	30.9	30.7	
1800.00	21.1	-26.3	-14.7	-27.7	1.2	0.7	20.7	22.0	2.0	31.1	31.7	30.9	30.8	30.9	30.8	
1900.00	21.1	-26.4	-14.1	-25.1	1.2	0.7	20.6	22.0	2.1	30.5	32.5	30.1	29.8	30.6	29.6	
2000.00	21.1	-26.5	-13.6	-22.5	1.2	0.7	20.3	21.8	2.1	30.6	32.2	30.5	30.3	30.2	30.2	
2100.00	21.1	-26.6	-13.0	-20.6	1.2	0.8	20.5	22.1	2.1	30.3	30.5	30.1	29.1	29.9	29.9	
2200.00	21.0	-26.7	-12.5	-19.1	1.2	0.8	20.3	21.9	2.1	31.2	30.7	30.6	30.2	30.2	30.3	
2300.00	21.0	-26.8	-11.9	-17.7	1.2	0.8	20.3	22.1	2.1	31.4	30.3	30.1	29.7	30.0	30.0	
2400.00	21.0	-26.9	-11.4	-16.5	1.2	0.8	20.1	22.1	2.2	29.0	29.7	29.4	28.8	29.1	28.3	
2500.00	20.9	-27.1	-11.0	-15.6	1.2	0.8	19.9	22.1	2.2	29.1	29.7	29.0	28.7	28.8	28.3	
2600.00	20.9	-27.1	-10.6	-14.8	1.2	0.8	19.7	22.1	2.2	28.3	29.4	28.8	28.3	28.1	28.0	
2700.00	20.8	-27.3	-10.2	-14.1	1.2	0.8	19.4	21.8	2.3	29.8	28.9	29.2	28.8	28.3	28.4	
2800.00	20.8	-27.4	-9.9	-13.5	1.2	0.8	19.4	21.6	2.3	28.3	29.8	28.7	28.4	28.1	28.1	
2900.00	20.7	-27.5	-9.6	-13.0	1.3	0.8	19.1	21.5	2.3	29.1	27.6	27.4	27.6	27.1	27.0	
3000.00	20.7	-27.6	-9.3	-12.5	1.3	0.8	19.2	21.7	2.3	29.6	28.1	27.6	27.6	27.2	27.0	
3100.00	20.7	-27.7	-9.0	-12.2	1.3	0.8	19.1	21.9	2.4	28.3	29.0	27.2	27.1	27.5	26.5	
3200.00	20.7	-27.7	-8.9	-11.9	1.3	0.8	19.1	21.8	2.4	28.3	28.9	27.7	27.6	26.9	26.8	
3300.00	20.7	-27.7	-8.7	-11.8	1.3	0.8	18.9	21.6	2.3	28.9	28.4	27.6	27.4	27.6	26.8	
3400.00	20.7	-27.8	-8.6	-11.7	1.3	0.8	18.8	21.5	2.4	28.5	27.8	28.0	27.8	27.2	27.1	
3500.00	20.7	-27.9	-8.6	-11.7	1.3	0.8	18.9	21.7	2.4	28.8	27.2	27.1	27.1	26.5	26.4	
3600.00	20.7	-27.8	-8.7	-11.8	1.3	0.8	18.9	21.7	2.3	27.7	28.0	27.1	26.9	26.4	26.2	
3700.00	20.8	-27.9	-8.7	-11.9	1.3	0.8	19.2	21.9	2.3	29.5	29.1	28.1	28.2	27.9	27.4	
3800.00	20.8	-28.0	-8.8	-12.1	1.3	0.8	19.2	21.9	2.3	27.9	28.5	27.2	27.0	26.5	26.2	
3900.00	20.9	-28.0	-9.0	-12.4	1.3	0.8	19.3	21.9	2.3	28.2	28.9	27.5	27.4	27.7	26.5	
4000.00	20.9	-28.0	-9.2	-12.7	1.3	0.8	19.2	22.0	2.3	29.4	28.4	28.1	27.7	27.4	26.9	
4100.00	20.9	-28.0	-9.5	-13.2	1.3	0.8	19.3	22.1	2.2	28.2	28.0	27.5	27.2	26.9	26.6	
4200.00	21.0	-28.0	-9.7	-13.7	1.3	0.8	19.3	22.1	2.2	27.8	27.6	27.7	27.1	27.2	26.8	
4300.00	21.1	-28.2	-10.0	-14.1	1.3	0.8	19.1	22.1	2.2	27.4	27.6	27.5	27.4	26.9	27.0	
4400.00	21.1	-28.1	-10.5	-14.7	1.3	0.8	19.1	22.0	2.2	27.6	27.8	27.3	27.2	26.7	26.6	
4500.00	21.2	-28.1	-10.9	-15.3	1.3	0.8	18.9	22.0	2.2	28.4	27.9	27.1	27.0	26.8	26.7	
4600.00	21.3	-28.3	-11.4	-15.9	1.3	0.8	18.5	21.8	2.2	28.0	27.8	27.1	26.9	26.7	26.4	
4700.00	21.3	-28.2	-11.9	-16.6	1.3	0.8	18.6	21.8	2.2	27.1	27.4	26.9	26.5	25.7	25.7	
4800.00	21.4	-28.3	-12.2	-17.0	1.3	0.8	18.9	21.7	2.2	28.1	27.9	27.4	27.1	26.9	26.2	
4900.00	21.4	-28.4	-12.9	-17.5	1.3	0.8	18.7	21.7	2.3	27.5	27.4	26.8	26.5	25.3	25.3	
5000.00	21.5	-28.4	-13.2	-18.2	1.3	0.8	18.7	21.6	2.3	26.9	27.1	26.4	26.2	25.0	25.0	
5100.00	21.5	-28.5	-13.4	-18.4	1.3	0.8	19.2	21.6	2.3	26.5	27.8	26.3	26.2	26.9	25.2	
5200.00	21.5	-28.6	-13.9	-18.8	1.4	0.8	19.1	21.6	2.3	27.8	27.3	26.4	26.5	26.6	25.9	
5300.00	21.6	-28.7	-13.6	-18.7	1.4	0.8	18.7	21.5	2.3	27.6	27.5	26.3	26.8	25.7	25.7	
5400.00	21.5	-29.0	-13.5	-18.3	1.4	0.9	18.1	21.3	2.3	26.4	26.9	26.4	26.2	26.3	25.5	
5500.00	21.5	-28.9	-13.5	-18.8	1.4	0.9	17.6	20.9	2.3	25.6	27.1	25.5	25.4	26.0	24.8	
5600.00	21.6	-29.1	-12.4	-17.9	1.4	0.9	17.1	20.5	2.3	26.8	27.5	26.7	26.6	25.4	24.5	
5700.00	21.4	-29.4	-12.0	-17.2	1.4	0.9	17.0	20.1	2.3	25.3	26.8	24.9	24.5	25.4	23.5	
5800.00	21.5	-29.3	-11.4	-17.1	1.4	0.9	17.2	19.8	2.3	25.3	26.0	25.0	24.5	24.6	22.3	
5900.00	21.4	-29.8	-10.2	-15.7	1.5	0.9	17.3	19.5	2.4	25.3	25.5	25.0	24.8	24.3	22.7	
6000.00	21.2	-29.9	-10.0	-15.5	1.5	0.9	17.3	19.1	2.4	26.2	25.8	24.8	24.5	24.4	22.5	
6100.00	21.2	-30.0	-9.0	-14.6	1.5	0.9	17.4	19.1	2.5	26.0	25.7	25.2	24.9	24.5	23.0	
6200.00	21.0	-30.6	-8.2	-13.4	1.5	1.0	17.5	18.9	2.5	25.7	25.0	24.8	24.6	23.5	23.7	
6300.00	20.9	-30.5	-7.8	-13.0	1.5	1.0	17.4	18.7	2.6	25.6	25.5	24.3	24.0	24.0	23.4	
6400.00	20.8	-31.0	-6.9	-12.0	1.5	1.0	17.4	18.7	2.6	25.7	25.4	24.9	24.6	24.0	22.3	
6500.00	20.4	-31.7	-6.4	-11.2	1.6	1.0	17.5	18.7	2.7	25.0	24.5	24.4	24.2	23.1	21.9	
6600.00	20.3	-31.8	-6.0	-10.8	1.6	1.0	17.6	18.8	2.7	25.8	24.6	24.1	23.8	23.2	21.5	
6700.00	20.0	-32.4	-5.3	-9.8	1.7	1.1	17.4	18.5	2.7	25.0	24.3	24.1	23.9	22.9	21.6	
6800.00	19.6	-33.1	-5.0													

TEST CONDITIONS: $V_{DD} = +5.0$ V, $V_{EN} = +5.0$ V, $I_{DD} = 73$ mA, $I_{EN} = 2.15$ mA @ Temperature = + 105°C

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	40.0	40.0	39.9	39.9	39.7	39.4	39.1
1000.0	39.2	39.2	39.1	39.0	38.8	38.5	38.1
2000.0	38.5	38.2	38.1	37.9	37.6	37.3	37.0
4000.0	43.7	43.6	43.4	43.3	42.9	42.6	42.5
6000.0	33.4	33.2	33.0	32.6	32.2	31.8	31.6
8000.0	37.5	37.0	36.7	36.7	37.6	39.5	42.0

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +5.0$ V, $V_{EN} = +5.0$ V, $I_{DD} = 80$ mA, $I_{EN} = 2.13$ mA @ Temperature = $+105^\circ\text{C}$

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure (dBm)										
5500.00	20.7	-29.7	-8.7	-8.2	1.4	0.8	17.3	20.8	2.2	27.0	26.8	26.6	26.4	26.2	25.8	
5600.00	20.9	-29.8	-8.5	-8.3	1.4	0.8	16.9	20.5	2.1	25.8	25.6	25.4	25.1	24.7	24.2	
5700.00	20.8	-29.8	-8.7	-8.4	1.4	0.8	16.8	20.2	2.1	26.3	25.9	25.7	25.6	25.3	24.9	
5800.00	21.0	-29.9	-8.5	-8.5	1.4	0.8	16.8	20.0	2.1	25.9	25.8	25.5	25.3	25.0	24.5	
5900.00	21.0	-29.9	-8.7	-8.7	1.4	0.8	16.8	19.5	2.1	26.2	25.4	25.4	25.3	25.1	24.7	
6000.00	21.1	-30.0	-8.4	-8.7	1.4	0.8	16.9	19.2	2.1	24.6	24.3	24.3	24.1	23.8	22.9	
6100.00	21.1	-29.9	-8.6	-9.0	1.4	0.8	17.5	19.4	2.1	25.4	25.7	25.3	25.1	24.9	24.2	
6200.00	21.2	-30.1	-8.3	-9.0	1.4	0.8	17.7	19.4	2.1	25.4	25.2	24.8	24.7	24.5	24.2	
6300.00	21.2	-30.1	-8.6	-9.3	1.5	0.8	18.0	19.5	2.1	26.0	26.4	25.9	25.7	25.6	25.3	
6400.00	21.3	-30.4	-8.3	-9.3	1.5	0.8	18.2	19.6	2.1	25.9	26.0	25.6	25.5	25.4	25.3	
6500.00	21.2	-30.5	-8.5	-9.7	1.5	0.8	18.2	19.5	2.2	25.7	26.1	25.9	25.8	25.7	25.5	
6600.00	21.3	-30.7	-8.2	-9.7	1.5	0.9	18.5	19.7	2.2	26.0	26.0	25.8	25.8	25.7	25.6	
6700.00	21.3	-30.7	-8.5	-10.2	1.5	0.9	18.4	19.7	2.2	25.9	25.8	25.8	25.7	25.6	25.6	
6800.00	21.3	-31.0	-8.3	-10.2	1.6	0.9	18.5	19.7	2.2	26.5	26.5	26.0	26.1	26.1	26.0	
6900.00	21.3	-31.1	-8.5	-10.7	1.6	0.9	18.6	19.7	2.2	26.5	27.0	26.2	26.2	26.3	26.4	
7000.00	21.3	-31.6	-8.3	-10.8	1.7	0.9	18.7	19.8	2.3	26.4	26.1	26.0	25.9	26.0	26.0	
7100.00	21.2	-31.6	-8.6	-11.4	1.7	0.9	18.6	19.7	2.3	26.2	26.9	26.3	26.2	26.3	26.4	
7200.00	21.1	-32.1	-8.3	-11.6	1.8	1.0	18.7	19.7	2.4	26.3	26.5	26.3	26.3	26.4	26.5	
7300.00	21.0	-32.3	-8.6	-12.3	1.9	1.0	18.6	19.6	2.4	25.6	25.8	25.8	25.8	26.0	26.1	
7400.00	20.9	-32.9	-8.3	-12.6	2.0	1.0	18.6	19.6	2.5	25.9	26.5	26.0	25.9	26.0	26.2	
7500.00	20.7	-33.1	-8.5	-13.5	2.1	1.0	18.3	19.3	2.6	26.2	26.2	26.0	26.1	26.3	26.5	
7600.00	20.5	-33.8	-8.1	-13.7	2.3	1.0	18.3	19.2	2.6	26.5	26.1	26.1	26.1	26.2	26.3	
7700.00	20.1	-34.2	-8.2	-14.8	2.4	1.1	18.2	19.1	2.7	25.5	24.9	24.9	25.0	25.1	25.1	
7800.00	19.8	-35.2	-7.5	-14.8	2.7	1.1	18.0	18.8	2.8	25.9	26.5	26.0	25.9	26.1	26.3	
7900.00	19.3	-35.5	-7.5	-15.7	2.9	1.1	17.8	18.6	2.9	25.6	26.1	25.9	26.0	26.2	26.4	
8000.00	18.7	-36.8	-6.6	-14.9	3.4	1.2	17.5	18.3	3.1	25.4	25.2	25.3	25.3	25.5	25.7	
8100.00	18.1	-37.0	-6.4	-14.9	3.6	1.2	17.3	18.1	3.2	25.6	26.1	25.5	25.4	25.5	25.6	
8200.00	17.2	-38.8	-5.5	-13.2	4.5	1.2	16.9	17.7	3.4	25.2	24.9	24.9	25.0	25.0	24.2	
8300.00	16.5	-38.8	-5.2	-12.5	4.6	1.2	16.6	17.4	3.5	25.7	25.0	25.3	25.2	25.3	24.7	
8400.00	15.3	-40.7	-4.4	-10.7	5.9	1.3	16.1	16.9	3.7	25.3	26.1	25.9	25.7	25.7	24.8	
8500.00	14.4	-41.2	-4.1	-9.8	6.4	1.3	15.5	16.3	4.0	24.9	24.6	24.7	24.5	24.5	23.7	

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)
5500.0	36.2	36.2	36.0	35.8	35.3	35.0	34.7
6000.0	34.5	34.4	34.1	33.7	33.4	33.0	32.7
7000.0	44.5	44.3	44.1	43.7	43.5	43.2	43.1
8000.0	52.4	52.2	51.9	51.6	51.3	51.0	51.0
8500.0	60.2	59.9	59.6	59.2	58.9	58.9	59.4



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +5.0$ V, $V_{EN} = 0$ V, $I_{DD} = 3$ mA, $I_{EN} = 0$ mA @ Temperature = $+105^{\circ}\text{C}$

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	K	Stability Measure	Noise Figure (dB)
200.00	-3.8	-3.9	-4.0	-9.1	1.1	0.9	4.0
300.00	-2.4	-2.5	-6.7	-12.0	1.0	0.7	2.6
400.00	-1.8	-1.8	-9.3	-14.1	1.0	0.6	2.3
500.00	-1.5	-1.5	-12.1	-15.8	1.0	0.5	1.7
600.00	-1.3	-1.4	-15.0	-16.9	1.0	0.5	1.6
700.00	-1.2	-1.3	-18.2	-17.8	1.0	0.5	1.6
800.00	-1.2	-1.3	-22.2	-17.9	1.0	0.4	1.6
900.00	-1.2	-1.3	-27.2	-17.7	1.0	0.4	1.5
1000.00	-1.2	-1.3	-30.6	-17.3	1.0	0.4	1.4
1100.00	-1.2	-1.3	-26.5	-17.0	1.0	0.4	1.5
1200.00	-1.2	-1.3	-23.0	-16.7	1.0	0.4	1.5
1300.00	-1.2	-1.3	-20.5	-16.3	1.0	0.4	1.6
1400.00	-1.2	-1.3	-18.7	-15.9	1.0	0.4	1.6
1500.00	-1.3	-1.4	-17.4	-15.5	1.0	0.5	1.7
1600.00	-1.3	-1.4	-16.2	-15.4	1.0	0.5	1.5
1700.00	-1.3	-1.5	-15.4	-15.4	1.0	0.5	1.4
1800.00	-1.4	-1.5	-14.7	-15.3	1.0	0.5	1.7
1900.00	-1.4	-1.6	-14.2	-15.1	1.0	0.5	1.7
2000.00	-1.4	-1.6	-13.7	-15.0	1.0	0.5	1.9
2100.00	-1.5	-1.7	-13.5	-15.1	1.0	0.5	1.7
2200.00	-1.5	-1.7	-13.2	-15.4	1.0	0.5	1.8
2300.00	-1.5	-1.8	-13.1	-15.6	1.0	0.6	1.9
2400.00	-1.5	-1.8	-13.0	-15.8	1.0	0.6	2.0
2500.00	-1.6	-1.9	-13.0	-16.2	1.1	0.6	2.1
2600.00	-1.6	-1.9	-13.0	-16.8	1.1	0.6	2.1
2700.00	-1.6	-2.0	-13.1	-17.5	1.1	0.6	2.2
2800.00	-1.6	-2.0	-13.3	-18.2	1.1	0.6	2.5
2900.00	-1.7	-2.1	-13.4	-18.9	1.1	0.6	2.2
3000.00	-1.7	-2.1	-13.5	-20.1	1.1	0.6	2.0
3100.00	-1.7	-2.1	-13.7	-21.5	1.1	0.7	2.8
3200.00	-1.7	-2.1	-13.8	-23.2	1.1	0.7	2.4
3300.00	-1.7	-2.1	-13.9	-24.8	1.1	0.7	2.1
3400.00	-1.7	-2.1	-13.9	-26.4	1.1	0.7	2.7
3500.00	-1.7	-2.1	-13.9	-27.4	1.1	0.7	2.3
3600.00	-1.7	-2.1	-13.8	-25.9	1.1	0.7	2.3
3700.00	-1.7	-2.1	-13.7	-23.7	1.1	0.7	2.8
3800.00	-1.8	-2.1	-13.5	-21.8	1.1	0.7	2.6
3900.00	-1.8	-2.1	-13.3	-20.1	1.1	0.7	2.2
4000.00	-1.8	-2.1	-13.1	-18.6	1.1	0.7	2.3
4100.00	-1.8	-2.2	-12.8	-17.2	1.1	0.7	2.4
4200.00	-1.8	-2.2	-12.5	-16.2	1.1	0.6	2.1
4300.00	-1.9	-2.2	-12.3	-15.4	1.1	0.6	2.0
4400.00	-1.9	-2.3	-12.0	-14.7	1.1	0.6	1.9
4500.00	-1.9	-2.3	-11.8	-14.0	1.1	0.6	2.2
4600.00	-1.9	-2.3	-11.6	-13.4	1.1	0.6	2.6
4700.00	-1.9	-2.3	-11.4	-13.0	1.1	0.6	2.4
4800.00	-1.9	-2.4	-11.3	-12.7	1.1	0.6	2.4
4900.00	-2.0	-2.4	-11.2	-12.5	1.1	0.6	2.3
5000.00	-2.0	-2.4	-11.1	-12.1	1.1	0.6	2.6
5100.00	-2.0	-2.4	-11.0	-12.0	1.1	0.6	2.1
5200.00	-2.0	-2.5	-11.0	-11.8	1.1	0.6	2.5
5300.00	-1.9	-2.5	-11.0	-11.7	1.1	0.6	2.1
5400.00	-1.9	-2.5	-11.1	-11.7	1.1	0.6	2.1
5500.00	-1.9	-2.5	-11.1	-11.5	1.1	0.6	2.2
5600.00	-1.9	-2.5	-11.3	-11.6	1.1	0.6	2.3
5700.00	-1.9	-2.5	-11.4	-11.7	1.1	0.6	2.2
5800.00	-1.8	-2.4	-11.6	-11.7	1.1	0.6	1.9
5900.00	-1.8	-2.5	-11.9	-11.9	1.1	0.6	1.5
6000.00	-1.8	-2.5	-12.0	-11.9	1.1	0.6	2.1
6100.00	-1.8	-2.4	-12.4	-12.0	1.1	0.6	2.1
6200.00	-1.8	-2.4	-12.8	-12.3	1.1	0.6	2.3
6300.00	-1.7	-2.4	-13.0	-12.4	1.1	0.6	2.4
6400.00	-1.7	-2.4	-13.4	-12.7	1.1	0.6	2.7
6500.00	-1.7	-2.4	-13.8	-12.8	1.1	0.6	1.9
6600.00	-1.7	-2.4	-14.0	-12.9	1.1	0.6	2.4
6700.00	-1.6	-2.4	-14.5	-13.2	1.1	0.6	2.8
6800.00	-1.7	-2.4	-14.8	-13.4	1.1	0.6	2.2
6900.00	-1.6	-2.4	-14.9	-13.4	1.1	0.6	2.8
7000.00	-1.7	-2.4	-15.2	-13.6	1.1	0.6	2.8
7100.00	-1.7	-2.5	-15.1	-13.6	1.1	0.6	2.2
7200.00	-1.7	-2.5	-14.9	-13.6	1.1	0.6	2.9
7300.00	-1.8	-2.5	-14.7	-13.4	1.1	0.6	2.7
7400.00	-1.9	-2.6	-14.2	-13.0	1.1	0.6	3.2
7500.00	-1.9	-2.6	-13.7	-12.8	1.1	0.6	3.4
7600.00	-2.0	-2.7	-13.2	-12.5	1.2	0.7	3.1
7700.00	-2.1	-2.8	-12.4	-11.8	1.2	0.7	3.3
7800.00	-2.2	-2.9	-11.8	-11.4	1.2	0.7	3.1
7900.00	-2.4	-3.1	-11.2	-10.7	1.2	0.7	3.3
8000.00	-2.5	-3.2	-10.2	-10.0	1.2	0.7	3.6



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TEST CONDITIONS: $V_{DD} = +5.0$ V, $V_{EN} = 0$ V, $I_{DD} = 3$ mA, $I_{EN} = 0$ mA @ Temperature = $+105^\circ\text{C}$

FREQ (MHz)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
400.0	29.1	27.9	25.8	22.7	17.7	14.7	13.8
1000.0	31.3	30.1	28.1	24.8	18.8	14.2	15.3
2000.0	33.0	32.3	31.0	28.7	24.7	18.1	16.2
4000.0	34.1	33.5	32.6	31.2	28.8	24.6	19.2
6000.0	34.5	34.2	33.4	31.6	28.6	22.9	17.0
8000.0	35.4	34.9	33.8	32.1	29.2	23.1	16.8

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	71.1	70.2	68.4	64.7	55.1	45.9	45.5
1000.0	71.6	71.5	71.1	68.6	58.6	53.7	51.3
2000.0	71.5	71.2	70.7	69.7	66.8	57.7	50.5
4000.0	73.4	73.5	73.6	74.1	74.8	73.4	54.8
6000.0	72.4	72.2	71.9	71.3	70.0	64.6	56.1
8000.0	83.4	83.2	83.0	82.6	81.4	77.7	66.8

FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
400.0	11.4	8.6
1000.0	11.2	9.1
2000.0	12.9	10.6
4000.0	15.1	12.4
6000.0	15.5	12.5
8000.0	15.4	12.0



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +5.0 V, V_{EN} = 0 V, I_{DD} = 3 mA, I_{EN} = 0 mA @ Temperature = +105°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)	FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
					K	Measure				
5500.00	-1.8	-2.4	-20.1	-17.3	1.1	0.7	3.0	5500.0	14.3	11.4
5600.00	-1.7	-2.4	-20.6	-17.1	1.1	0.7	3.0	6000.0	14.8	12.0
5700.00	-1.7	-2.5	-20.5	-16.9	1.1	0.7	3.1	7000.0	16.4	12.9
5800.00	-1.7	-2.5	-19.9	-16.3	1.1	0.7	3.1	8000.0	17.2	11.9
5900.00	-1.7	-2.5	-19.0	-15.8	1.1	0.7	3.0	8500.0	16.0	10.6
6000.00	-1.7	-2.5	-18.3	-15.2	1.1	0.7	2.8			
6100.00	-1.7	-2.5	-17.1	-14.5	1.1	0.7	3.0			
6200.00	-1.7	-2.6	-16.3	-13.9	1.1	0.7	3.1			
6300.00	-1.8	-2.6	-15.3	-13.2	1.1	0.7	3.2			
6400.00	-1.8	-2.7	-14.6	-12.7	1.1	0.7	2.7			
6500.00	-1.8	-2.7	-13.7	-12.1	1.1	0.7	2.9			
6600.00	-1.9	-2.8	-13.1	-11.6	1.1	0.7	2.8			
6700.00	-1.9	-2.8	-12.3	-11.1	1.1	0.7	3.3			
6800.00	-2.0	-2.9	-11.7	-10.7	1.1	0.7	3.3			
6900.00	-2.0	-3.0	-11.0	-10.2	1.1	0.7	3.1			
7000.00	-2.1	-3.1	-10.5	-9.8	1.1	0.7	3.1			
7100.00	-2.2	-3.1	-9.9	-9.3	1.1	0.7	3.2			
7200.00	-2.3	-3.2	-9.4	-8.9	1.1	0.7	3.5			
7300.00	-2.4	-3.4	-8.9	-8.4	1.1	0.7	3.3			
7400.00	-2.6	-3.5	-8.4	-8.1	1.2	0.7	3.4			
7500.00	-2.7	-3.6	-7.9	-7.7	1.2	0.6	3.4			
7600.00	-2.9	-3.7	-7.5	-7.3	1.2	0.6	3.3			
7700.00	-3.0	-3.9	-7.0	-6.9	1.2	0.6	3.5			
7800.00	-3.2	-4.1	-6.6	-6.6	1.2	0.6	3.3			
7900.00	-3.4	-4.3	-6.2	-6.2	1.2	0.6	3.9			
8000.00	-3.6	-4.5	-5.9	-5.9	1.2	0.6	4.1			
8100.00	-3.8	-4.7	-5.4	-5.5	1.2	0.6	4.2			
8200.00	-4.1	-4.9	-5.2	-5.3	1.2	0.6	4.1			
8300.00	-4.3	-5.1	-4.8	-4.9	1.2	0.6	3.9			
8400.00	-4.5	-5.3	-4.6	-4.8	1.2	0.6	4.3			
8500.00	-4.7	-5.5	-4.2	-4.5	1.2	0.6	4.2			

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
5500.0	70.5	70.5	70.3	69.8	68.3	63.8	57.9	35.7	35.6	34.7	34.0	31.9	28.3	22.2
6000.0	75.7	75.5	75.3	75.0	74.5	72.6	66.5	36.7	36.3	35.5	33.7	30.8	25.8	17.6
7000.0	86.1	85.9	85.7	85.3	84.3	81.5	72.3	36.6	36.5	35.8	32.9	30.4	26.5	20.8
8000.0	83.6	83.7	83.5	83.2	82.6	80.6	73.5	36.3	35.9	35.2	34.9	32.9	29.5	23.0
8500.0	93.7	93.8	93.7	93.8	93.0	90.4	96.9	35.8	34.9	33.5	30.8	26.2	17.4	15.6



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IF/RF MICROWAVE COMPONENTS



REV. OR

TSY-83LN+

3/26/2024

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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +5.25 V, V_{EN} = +5.25 V, I_{DD} = 79 mA, I_{EN} = 2.26 mA @ Temperature = + 105°C

FREQ (GHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure										
200.00	14.5	-32.7	-1.9	-4.8	1.5	1.0	19.6	21.1	5.7	30.7	30.6	31.3	31.6	30.7	29.7	30.4
300.00	19.2	-28.0	-5.7	-9.0	1.2	0.8	19.9	21.3	3.2	31.5	32.2	31.5	32.3	31.8	31.0	31.4
400.00	20.7	-26.4	-11.6	-15.2	1.2	0.7	20.4	21.6	2.4	31.6	33.2	33.4	34.0	33.0	31.6	32.7
500.00	21.1	-26.1	-17.6	-20.2	1.2	0.7	20.8	21.7	2.1	30.8	32.1	32.5	32.8	32.7	32.4	32.7
600.00	21.2	-25.9	-19.7	-20.0	1.1	0.7	21.0	21.8	1.9	31.9	32.9	34.3	34.1	33.7	33.1	33.7
700.00	21.2	-25.9	-18.6	-18.8	1.1	0.7	21.2	22.0	1.8	31.6	32.9	33.5	33.8	33.3	32.7	33.2
800.00	21.2	-26.0	-17.5	-18.3	1.1	0.7	21.2	22.0	1.8	31.8	33.2	33.9	33.3	32.9	33.1	32.7
900.00	21.2	-26.0	-16.8	-18.2	1.1	0.7	21.3	22.1	1.8	31.5	33.1	33.8	33.5	33.3	32.3	33.0
1000.00	21.2	-26.0	-16.4	-18.5	1.1	0.7	21.4	22.2	1.8	33.0	33.3	33.5	34.3	33.7	33.0	33.6
1100.00	21.2	-26.1	-16.3	-19.0	1.1	0.7	21.3	22.1	1.8	33.7	33.1	33.8	33.8	33.4	31.9	33.1
1200.00	21.2	-26.1	-16.3	-20.0	1.2	0.7	21.4	22.3	1.8	32.9	32.9	33.4	32.8	32.4	32.8	32.8
1300.00	21.3	-26.1	-16.2	-21.1	1.2	0.7	21.4	22.3	1.8	32.2	32.4	32.7	32.9	32.6	31.9	32.4
1400.00	21.3	-26.2	-16.2	-22.6	1.2	0.7	21.3	22.2	1.8	33.0	32.2	32.8	33.1	32.8	32.2	32.8
1500.00	21.3	-26.3	-16.1	-24.6	1.2	0.7	21.2	22.3	1.8	31.7	31.7	31.9	31.5	30.9	31.5	31.5
1600.00	21.2	-26.3	-15.7	-27.0	1.2	0.7	21.3	22.4	1.9	30.9	31.7	32.5	32.5	32.1	31.3	32.0
1700.00	21.2	-26.4	-15.4	-28.1	1.2	0.7	21.3	22.5	1.9	31.3	31.0	32.0	31.9	31.5	30.8	31.5
1800.00	21.3	-26.4	-15.1	-28.4	1.2	0.7	21.1	22.4	1.9	31.3	31.7	31.8	31.5	31.8	31.4	31.4
1900.00	21.3	-26.5	-14.6	-26.2	1.2	0.7	21.1	22.4	2.0	29.8	32.5	30.7	31.0	30.5	30.9	30.2
2000.00	21.2	-26.6	-14.1	-23.6	1.2	0.7	20.8	22.3	2.0	31.6	32.2	31.1	31.5	31.0	31.0	30.6
2100.00	21.2	-26.7	-13.5	-21.6	1.2	0.7	21.0	22.5	2.1	30.9	30.3	31.2	30.9	30.8	31.5	30.3
2200.00	21.2	-26.8	-12.9	-19.9	1.2	0.8	20.9	22.4	2.1	31.5	30.7	31.4	31.7	31.3	31.2	30.8
2300.00	21.2	-26.9	-12.4	-18.4	1.2	0.8	20.8	22.5	2.1	30.2	31.4	30.8	31.2	31.0	30.4	30.4
2400.00	21.2	-27.0	-11.8	-17.1	1.2	0.8	20.5	22.5	2.1	29.8	29.7	29.7	29.8	29.4	29.9	28.9
2500.00	21.1	-27.1	-11.4	-16.2	1.2	0.8	20.4	22.5	2.1	30.6	29.7	29.6	29.8	29.3	29.3	28.9
2600.00	21.1	-27.2	-11.0	-15.3	1.2	0.8	20.1	22.4	2.2	30.1	29.3	29.3	29.5	29.2	29.2	28.6
2700.00	21.0	-27.4	-10.6	-14.6	1.2	0.8	19.9	22.2	2.2	29.9	28.9	29.7	30.0	29.5	29.0	29.1
2800.00	21.0	-27.5	-10.2	-14.0	1.2	0.8	19.8	22.0	2.3	30.5	29.8	29.3	29.5	29.1	28.9	28.6
2900.00	21.0	-27.6	-9.9	-13.4	1.3	0.8	19.6	21.9	2.3	29.0	28.3	28.3	28.5	28.1	28.3	27.4
3000.00	20.9	-27.6	-9.6	-12.9	1.3	0.8	19.7	22.1	2.2	28.3	28.1	28.4	28.5	28.0	27.7	27.6
3100.00	20.9	-27.7	-9.3	-12.5	1.3	0.8	19.5	22.2	2.3	27.4	29.0	28.1	28.1	27.7	27.6	27.1
3200.00	20.9	-27.8	-9.1	-12.3	1.3	0.8	19.6	22.2	2.3	28.4	28.9	28.4	28.4	28.1	28.5	27.5
3300.00	20.9	-27.8	-9.0	-12.1	1.3	0.8	19.4	22.0	2.3	27.9	28.4	28.4	28.3	27.9	28.1	27.4
3400.00	20.9	-27.9	-8.9	-12.0	1.3	0.8	19.2	21.8	2.3	30.1	27.8	28.4	28.9	28.3	28.1	27.9
3500.00	20.9	-27.9	-8.8	-12.0	1.3	0.8	19.4	22.0	2.4	28.2	28.2	28.0	28.1	27.6	28.3	27.1
3600.00	20.9	-27.9	-8.9	-12.1	1.3	0.8	19.4	22.0	2.3	28.0	27.7	28.0	27.7	27.7	27.0	27.0
3700.00	21.0	-28.0	-8.9	-12.3	1.3	0.8	19.7	22.2	2.3	29.1	28.8	29.2	29.2	28.6	28.7	28.2
3800.00	21.0	-28.0	-9.0	-12.5	1.3	0.8	19.7	22.2	2.2	27.9	28.5	28.0	28.0	27.5	28.7	27.1
3900.00	21.1	-28.1	-9.2	-12.7	1.3	0.8	19.7	22.3	2.2	27.8	28.9	28.2	28.4	28.1	28.5	27.5
4000.00	21.1	-28.1	-9.3	-13.1	1.3	0.8	19.6	22.3	2.2	28.0	28.4	28.5	28.7	28.2	28.5	27.8
4100.00	21.2	-28.0	-9.6	-13.6	1.3	0.8	19.7	22.4	2.2	28.2	27.9	28.2	28.2	27.8	28.7	27.3
4200.00	21.2	-28.1	-9.9	-14.1	1.3	0.8	19.8	22.4	2.2	28.3	27.6	28.3	28.2	27.7	27.7	27.3
4300.00	21.3	-28.2	-10.2	-14.5	1.3	0.8	19.6	22.3	2.1	28.4	27.6	28.1	28.5	27.8	27.8	27.5
4400.00	21.3	-28.3	-10.7	-15.2	1.3	0.8	19.5	22.3	2.2	28.2	27.8	27.9	28.0	27.6	27.7	27.0
4500.00	21.4	-28.3	-11.0	-15.8	1.3	0.8	19.3	22.2	2.1	27.4	28.5	27.8	27.8	27.4	27.7	26.9
4600.00	21.5	-28.3	-11.5	-16.4	1.3	0.8	19.0	22.0	2.2	28.0	27.8	28.4	28.4	28.1	28.5	27.5
4700.00	21.5	-28.3	-12.1	-17.2	1.3	0.8	19.1	22.0	2.2	27.2	27.4	27.4	27.5	26.9	27.4	26.3
4800.00	21.6	-28.4	-12.4	-17.6	1.3	0.8	19.3	22.1	2.2	28.3	27.9	27.6	28.1	27.2	26.9	26.9
4900.00	21.6	-28.4	-13.1	-18.2	1.3	0.8	19.1	21.9	2.2	27.1	27.4	27.5	27.5	26.8	27.9	26.1
5000.00	21.7	-28.5	-13.4	-19.0	1.3	0.8	19.1	21.8	2.2	27.3	27.1	26.9	27.3	26.5	27.6	25.9
5100.00	21.7	-28.6	-13.6	-19.1	1.3	0.8	19.5	21.8	2.2	26.9	27.8	27.1	27.1	26.5	27.8	26.1
5200.00	21.7	-28.7	-14.2	-19.6	1.4	0.8	19.5	21.8	2.2	26.7	27.3	27.1	27.3	26.7	28.0	26.5
5300.00	21.8	-28.8	-13.9	-19.5	1.4	0.8	19.0	21.7	2.2	26.3	27.5	27.0	27.2	26.5	27.1	26.1
5400.00	21.8	-29.0	-13.7	-19.1	1.4	0.8	18.5	21.4	2.2	27.3	26.9	26.9	27.1	26.3	26.5	25.9
5500.00	21.8	-28.9	-13.7	-19.6	1.4	0.8	18.0	21.1	2.2	25.9	27.1	26.1	26.3	25.4	26.9	24.9
5600.00	21.8	-29.1	-12.6	-18.6	1.4	0.9	17.5	20.6	2.2	26.1	26.6	26.3	26.5	25.5	25.3	24.7
5700.00	21.6	-29.4	-12.2	-17.8	1.4	0.9	17.5	20.3	2.2	25.3	26.8	25.4	25.5	24.5	25.0	23.6
5800.00	21.7	-29.3	-11.6	-17.7	1.4	0.9	17.6	20.0	2.3	25.0	26.0	25.2	25.4	24.3	25.5	23.3
5900.00	21.6	-29.8	-10.4	-16.2	1.4	0.9	17.7	19.8	2.3	25.1	25.5	25.3	25.3	24.5	25.9	23.7
6000.00	21.4	-29.8	-10.2	-16.0	1.5	0.9	17.7	19.4	2.3	24.9	25.8	25.1	25.3	24.1	25.4	23.3
6100.00	21.5	-30.0	-9.1	-15.0	1.4	0.9	17.8	19.3	2.4	25.0	25.7	25.2	25.7	24.5	25.8	23.8
6200.00	21.2	-30.5	-8.2	-13.6	1.5	1.0	17.8	19.2	2.4	24.7	25.0	25.3	25.5	24.3	25.2	23.6
6300.00	21.1	-30.7	-7.9	-13.3	1.5	1.0	17.7	19.0	2.5	24.5	25.5	24.4	24.6	23.6	25.7	23.2
6400.00	21.0	-31.1	-7.0	-12.2	1.5	1.0	17.8	19.0	2.5	24.9	2					

TEST CONDITIONS: $V_{DD} = +5.25$ V, $V_{EN} = +5.25$ V, $I_{DD} = 79$ mA, $I_{EN} = 2.26$ mA @ Temperature = + 105°C

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	41.5	41.5	41.5	41.4	41.2	40.9	40.7
1000.0	40.7	40.7	40.6	40.4	40.2	40.0	39.6
2000.0	39.8	39.5	39.3	39.2	38.9	38.6	38.3
4000.0	44.4	43.9	43.7	43.5	43.2	42.9	42.8
6000.0	33.8	33.6	33.3	33.1	32.7	32.3	32.1
8000.0	38.0	37.6	37.2	37.2	37.9	39.7	42.1

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +5.25 V, V_{EN} = +5.25 V, I_{DD} = 86 mA, I_{EN} = 2.24 mA @ Temperature = +105°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure (dBm)										
5500.00	20.9	-29.7	-8.7	-8.3	1.4	0.8	17.8	20.9	2.2	27.0	27.3	27.4	27.1	27.1	26.9	26.5
5600.00	21.1	-29.8	-8.5	-8.4	1.4	0.8	17.4	20.7	2.1	25.9	26.1	26.0	25.7	25.7	24.9	24.9
5700.00	21.0	-29.9	-8.7	-8.6	1.4	0.8	17.2	20.4	2.1	27.1	25.6	26.1	25.9	25.7	25.2	25.3
5800.00	21.2	-30.0	-8.5	-8.6	1.4	0.8	17.3	20.1	2.1	26.1	25.8	26.2	26.1	25.9	25.7	25.3
5900.00	21.2	-30.0	-8.7	-8.8	1.4	0.8	17.3	19.8	2.1	26.3	25.9	25.8	25.7	25.4	24.9	24.9
6000.00	21.3	-30.1	-8.4	-8.8	1.4	0.8	17.3	19.5	2.1	24.9	25.2	24.8	24.6	24.4	24.1	23.5
6100.00	21.3	-30.1	-8.6	-9.1	1.4	0.8	17.8	19.6	2.1	25.3	25.8	25.7	25.6	25.5	25.3	24.9
6200.00	21.4	-30.3	-8.3	-9.1	1.4	0.8	18.0	19.6	2.1	25.2	25.0	25.2	25.2	25.1	24.9	24.6
6300.00	21.4	-30.2	-8.5	-9.4	1.5	0.8	18.3	19.8	2.2	25.9	26.3	26.2	26.2	26.1	26.0	26.0
6400.00	21.5	-30.5	-8.2	-9.3	1.5	0.8	18.5	19.9	2.2	25.8	26.3	26.1	26.0	26.0	25.9	25.9
6500.00	21.4	-30.6	-8.4	-9.7	1.5	0.8	18.6	19.8	2.2	26.6	26.8	26.3	26.3	26.2	26.2	26.1
6600.00	21.5	-30.7	-8.2	-9.7	1.5	0.9	18.8	20.0	2.2	26.1	26.3	26.5	26.2	26.2	26.3	26.2
6700.00	21.5	-30.8	-8.4	-10.1	1.5	0.9	18.8	19.9	2.2	26.1	26.0	26.1	26.1	26.2	26.2	26.1
6800.00	21.5	-31.2	-8.2	-10.2	1.6	0.9	18.8	20.0	2.2	26.3	26.9	26.4	26.4	26.5	26.5	26.6
6900.00	21.5	-31.2	-8.5	-10.6	1.6	0.9	18.9	20.0	2.2	26.2	26.4	26.5	26.6	26.7	26.8	26.9
7000.00	21.5	-31.6	-8.2	-10.7	1.6	0.9	19.0	20.0	2.3	26.2	26.3	26.1	26.2	26.2	26.4	26.5
7100.00	21.4	-31.7	-8.5	-11.3	1.7	0.9	18.9	20.0	2.3	26.6	26.3	26.5	26.6	26.6	26.7	26.9
7200.00	21.3	-32.3	-8.3	-11.5	1.8	1.0	18.9	20.0	2.4	26.4	26.5	26.4	26.5	26.6	26.8	26.9
7300.00	21.2	-32.5	-8.5	-12.2	1.9	1.0	18.8	19.8	2.4	26.0	26.1	26.0	26.0	26.1	26.4	26.5
7400.00	21.1	-33.0	-8.2	-12.4	2.0	1.0	18.9	19.8	2.5	25.8	26.0	26.1	26.1	26.3	26.5	26.6
7500.00	20.8	-33.3	-8.4	-13.3	2.1	1.0	18.6	19.5	2.5	25.9	25.5	26.1	26.2	26.4	26.6	26.8
7600.00	20.6	-34.0	-8.0	-13.5	2.3	1.0	18.5	19.4	2.6	25.9	26.2	26.3	26.3	26.4	26.6	26.8
7700.00	20.3	-34.3	-8.1	-14.7	2.4	1.1	18.4	19.3	2.7	25.1	25.2	25.2	25.2	25.3	25.5	25.5
7800.00	19.9	-35.5	-7.4	-14.7	2.8	1.1	18.2	19.1	2.8	26.1	26.2	26.0	26.1	26.2	26.4	26.6
7900.00	19.4	-35.7	-7.4	-15.7	3.0	1.1	18.0	18.9	3.0	26.5	25.4	26.1	26.1	26.3	26.5	26.7
8000.00	18.9	-37.1	-6.6	-15.0	3.5	1.2	17.7	18.6	3.1	25.2	25.6	25.5	25.5	25.8	26.0	26.0
8100.00	18.2	-37.4	-6.3	-15.1	3.7	1.2	17.5	18.3	3.2	25.1	25.6	25.6	25.7	25.8	26.1	25.9
8200.00	17.3	-39.2	-5.4	-13.4	4.6	1.2	17.1	17.9	3.4	25.1	24.9	25.1	25.2	25.4	24.6	24.6
8300.00	16.6	-39.2	-5.1	-12.7	4.8	1.2	16.8	17.5	3.6	24.9	25.1	25.4	25.4	25.7	25.8	25.0
8400.00	15.4	-41.4	-4.4	-10.9	6.3	1.3	16.3	17.0	3.8	25.8	26.3	25.8	26.0	26.0	26.0	25.1
8500.00	14.5	-41.4	-4.0	-10.0	6.4	1.3	15.6	16.4	4.0	24.7	24.5	24.9	25.0	24.9	24.1	21.9

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)
5500.0	36.7	36.7	36.5	36.3	35.9	35.7	35.4
6000.0	34.9	34.8	34.5	34.2	33.8	33.4	33.1
7000.0	44.8	44.6	44.4	44.1	43.8	43.5	43.4
8000.0	52.7	52.5	52.2	51.9	51.6	51.3	51.3
8500.0	60.4	60.2	59.8	59.5	59.2	59.2	59.6



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +5.25$ V, $V_{EN} = 0$ V, $I_{DD} = 3$ mA, $I_{EN} = 0$ mA @ Temperature = $+105^\circ\text{C}$

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)
					K	Measure	
200.00	-3.8	-3.9	-4.0	-9.2	1.1	0.9	3.9
300.00	-2.4	-2.5	-6.7	-12.0	1.0	0.7	2.6
400.00	-1.8	-1.9	-9.3	-14.1	1.0	0.6	2.1
500.00	-1.5	-1.6	-12.1	-15.8	1.0	0.5	1.7
600.00	-1.3	-1.4	-15.0	-16.9	1.0	0.5	1.6
700.00	-1.3	-1.3	-18.2	-17.7	1.0	0.5	1.6
800.00	-1.2	-1.3	-22.1	-17.9	1.0	0.4	1.6
900.00	-1.2	-1.3	-27.0	-17.6	1.0	0.4	1.5
1000.00	-1.2	-1.3	-30.3	-17.3	1.0	0.4	1.5
1100.00	-1.2	-1.3	-26.4	-16.9	1.0	0.4	1.3
1200.00	-1.2	-1.3	-22.9	-16.7	1.0	0.4	1.3
1300.00	-1.2	-1.3	-20.5	-16.3	1.0	0.4	1.7
1400.00	-1.2	-1.4	-18.7	-15.8	1.0	0.4	1.6
1500.00	-1.3	-1.4	-17.3	-15.5	1.0	0.5	1.6
1600.00	-1.3	-1.4	-16.3	-15.4	1.0	0.5	1.7
1700.00	-1.3	-1.5	-15.4	-15.3	1.0	0.5	1.9
1800.00	-1.4	-1.5	-14.7	-15.2	1.0	0.5	1.6
1900.00	-1.4	-1.6	-14.2	-15.1	1.0	0.5	1.6
2000.00	-1.4	-1.6	-13.7	-15.0	1.0	0.5	1.7
2100.00	-1.5	-1.7	-13.5	-15.1	1.0	0.5	1.6
2200.00	-1.5	-1.7	-13.2	-15.4	1.0	0.5	2.0
2300.00	-1.5	-1.8	-13.1	-15.6	1.0	0.6	2.0
2400.00	-1.6	-1.8	-13.0	-15.8	1.0	0.6	2.1
2500.00	-1.6	-1.9	-12.9	-16.2	1.1	0.6	2.2
2600.00	-1.6	-1.9	-13.0	-16.8	1.1	0.6	2.2
2700.00	-1.6	-2.0	-13.1	-17.5	1.1	0.6	2.2
2800.00	-1.6	-2.0	-13.2	-18.2	1.1	0.6	2.4
2900.00	-1.7	-2.1	-13.4	-19.0	1.1	0.6	2.4
3000.00	-1.7	-2.1	-13.5	-20.0	1.1	0.7	2.2
3100.00	-1.7	-2.1	-13.6	-21.5	1.1	0.7	2.2
3200.00	-1.7	-2.1	-13.7	-23.1	1.1	0.7	2.5
3300.00	-1.7	-2.1	-13.8	-24.7	1.1	0.7	2.7
3400.00	-1.7	-2.1	-13.9	-26.3	1.1	0.7	2.5
3500.00	-1.7	-2.1	-13.9	-27.2	1.1	0.7	2.5
3600.00	-1.7	-2.1	-13.8	-25.8	1.1	0.7	2.5
3700.00	-1.8	-2.1	-13.7	-23.6	1.1	0.7	2.6
3800.00	-1.8	-2.1	-13.5	-21.7	1.1	0.7	2.5
3900.00	-1.8	-2.1	-13.3	-20.1	1.1	0.7	2.4
4000.00	-1.8	-2.2	-13.1	-18.6	1.1	0.7	2.1
4100.00	-1.8	-2.2	-12.8	-17.2	1.1	0.7	2.3
4200.00	-1.8	-2.2	-12.4	-16.2	1.1	0.7	2.3
4300.00	-1.9	-2.2	-12.2	-15.4	1.1	0.6	2.3
4400.00	-1.9	-2.3	-12.0	-14.6	1.1	0.6	1.9
4500.00	-1.9	-2.3	-11.7	-14.0	1.1	0.6	2.1
4600.00	-1.9	-2.3	-11.5	-13.4	1.1	0.6	2.8
4700.00	-1.9	-2.3	-11.4	-13.0	1.1	0.6	2.5
4800.00	-2.0	-2.4	-11.3	-12.7	1.1	0.6	2.4
4900.00	-2.0	-2.4	-11.2	-12.4	1.1	0.6	2.0
5000.00	-2.0	-2.4	-11.1	-12.1	1.1	0.6	2.0
5100.00	-2.0	-2.5	-11.0	-11.9	1.1	0.6	2.6
5200.00	-2.0	-2.5	-11.0	-11.8	1.1	0.6	2.3
5300.00	-1.9	-2.5	-11.0	-11.7	1.1	0.6	2.7
5400.00	-2.0	-2.5	-11.1	-11.6	1.1	0.6	2.0
5500.00	-1.9	-2.5	-11.1	-11.5	1.1	0.6	1.9
5600.00	-1.9	-2.5	-11.3	-11.6	1.1	0.6	2.1
5700.00	-1.9	-2.5	-11.4	-11.7	1.1	0.6	2.0
5800.00	-1.9	-2.5	-11.6	-11.6	1.1	0.6	1.9
5900.00	-1.9	-2.5	-11.9	-11.9	1.1	0.6	1.8
6000.00	-1.8	-2.5	-12.0	-11.8	1.1	0.6	1.9
6100.00	-1.8	-2.4	-12.4	-12.0	1.1	0.6	2.8
6200.00	-1.8	-2.4	-12.8	-12.3	1.1	0.6	2.7
6300.00	-1.7	-2.4	-13.0	-12.4	1.1	0.6	2.3
6400.00	-1.7	-2.4	-13.5	-12.7	1.1	0.6	2.7
6500.00	-1.7	-2.4	-13.8	-12.8	1.1	0.6	2.4
6600.00	-1.7	-2.4	-14.0	-12.8	1.1	0.6	2.2
6700.00	-1.6	-2.4	-14.5	-13.2	1.1	0.6	2.9
6800.00	-1.7	-2.4	-14.8	-13.4	1.1	0.6	2.4
6900.00	-1.6	-2.4	-14.9	-13.4	1.1	0.6	2.7
7000.00	-1.7	-2.4	-15.1	-13.5	1.1	0.6	2.4
7100.00	-1.7	-2.5	-15.0	-13.5	1.1	0.6	2.5
7200.00	-1.7	-2.5	-14.9	-13.5	1.1	0.6	3.0
7300.00	-1.8	-2.5	-14.7	-13.4	1.1	0.6	2.9
7400.00	-1.9	-2.6	-14.2	-13.0	1.1	0.6	3.2
7500.00	-1.9	-2.6	-13.6	-12.8	1.1	0.6	2.9
7600.00	-2.0	-2.7	-13.2	-12.5	1.2	0.7	3.0
7700.00	-2.1	-2.8	-12.4	-11.8	1.2	0.7	3.0
7800.00	-2.2	-2.9	-11.8	-11.4	1.2	0.7	3.2
7900.00	-2.4	-3.1	-11.2	-10.7	1.2	0.7	3.0
8000.00	-2.5	-3.2	-10.2	-10.0	1.2	0.7	3.6

TEST CONDITIONS: $V_{DD} = +5.25$ V, $V_{EN} = 0$ V, $I_{DD} = 3$ mA, $I_{EN} = 0$ mA @ Temperature = +105°C

FREQ (MHz)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
400.0	28.6	27.4	25.4	22.3	17.4	14.5	13.6
1000.0	30.8	29.7	27.7	24.4	18.4	14.1	15.1
2000.0	32.5	31.8	30.5	28.2	24.2	17.8	16.1
4000.0	33.1	33.0	32.0	30.8	28.4	24.1	18.9
6000.0	34.2	33.8	32.7	31.0	28.0	22.1	16.8
8000.0	35.1	34.3	33.5	31.6	28.6	22.3	16.7

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	70.6	69.6	67.9	64.1	54.3	45.7	45.2
1000.0	71.8	71.7	71.0	67.9	57.0	54.8	50.7
2000.0	71.0	70.4	69.9	68.7	65.2	56.3	49.0
4000.0	73.6	73.6	73.8	74.2	74.9	73.8	54.9
6000.0	72.6	72.4	72.1	71.5	70.1	64.1	56.0
8000.0	83.3	83.2	83.0	82.5	81.2	76.9	66.4

FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
400.0	11.4	8.5
1000.0	11.0	9.0
2000.0	12.9	10.5
4000.0	14.9	12.3
6000.0	15.3	12.3
8000.0	15.4	11.8



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +5.25 V, V_{EN} = 0 V, I_{DD} = 3 mA, I_{EN} = 0 mA @ Temperature = +105°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)	FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
					K	Measure				
5500.00	-1.8	-2.4	-20.1	-17.3	1.1	0.7	3.0	5500.0	14.1	11.2
5600.00	-1.7	-2.4	-20.6	-17.2	1.1	0.7	3.0	6000.0	14.6	11.8
5700.00	-1.7	-2.4	-20.5	-16.9	1.1	0.7	3.1	7000.0	16.2	12.7
5800.00	-1.7	-2.5	-19.9	-16.3	1.1	0.7	2.9	8000.0	17.0	11.7
5900.00	-1.7	-2.5	-19.0	-15.8	1.1	0.7	2.8	8500.0	15.8	10.4
6000.00	-1.7	-2.5	-18.2	-15.2	1.1	0.7	3.0			
6100.00	-1.7	-2.5	-17.1	-14.5	1.1	0.7	2.7			
6200.00	-1.7	-2.6	-16.3	-13.9	1.1	0.7	3.1			
6300.00	-1.8	-2.6	-15.3	-13.2	1.1	0.7	3.0			
6400.00	-1.8	-2.7	-14.5	-12.7	1.1	0.7	3.0			
6500.00	-1.8	-2.7	-13.7	-12.1	1.1	0.7	3.0			
6600.00	-1.9	-2.8	-13.1	-11.6	1.1	0.7	3.0			
6700.00	-1.9	-2.8	-12.3	-11.1	1.1	0.7	3.0			
6800.00	-2.0	-2.9	-11.7	-10.7	1.1	0.7	3.1			
6900.00	-2.0	-3.0	-11.0	-10.2	1.1	0.7	3.3			
7000.00	-2.1	-3.0	-10.5	-9.7	1.1	0.7	3.3			
7100.00	-2.2	-3.1	-9.9	-9.3	1.1	0.7	3.1			
7200.00	-2.3	-3.2	-9.4	-8.9	1.1	0.7	3.2			
7300.00	-2.4	-3.4	-8.8	-8.4	1.1	0.7	3.3			
7400.00	-2.6	-3.5	-8.4	-8.1	1.2	0.7	3.2			
7500.00	-2.7	-3.6	-7.9	-7.7	1.2	0.6	3.6			
7600.00	-2.9	-3.8	-7.5	-7.3	1.2	0.6	3.5			
7700.00	-3.1	-3.9	-7.0	-6.9	1.2	0.6	3.6			
7800.00	-3.2	-4.1	-6.6	-6.6	1.2	0.6	3.2			
7900.00	-3.4	-4.3	-6.2	-6.2	1.2	0.6	4.2			
8000.00	-3.6	-4.5	-5.9	-5.9	1.2	0.6	4.2			
8100.00	-3.8	-4.7	-5.4	-5.5	1.2	0.6	4.5			
8200.00	-4.1	-4.9	-5.2	-5.3	1.2	0.6	3.9			
8300.00	-4.3	-5.1	-4.8	-4.9	1.2	0.6	4.1			
8400.00	-4.5	-5.3	-4.6	-4.8	1.2	0.6	3.7			
8500.00	-4.7	-5.5	-4.2	-4.5	1.2	0.6	4.1			

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
5500.0	70.8	70.7	70.6	70.1	68.3	63.7	57.4	35.7	35.0	34.0	33.5	31.3	27.6	21.3
6000.0	75.1	75.1	75.1	74.9	74.3	72.4	65.7	35.3	35.4	34.9	33.0	30.2	25.0	17.1
7000.0	86.0	85.8	85.6	85.0	84.0	80.9	70.6	36.0	35.7	35.3	32.3	29.8	25.9	20.2
8000.0	83.6	83.5	83.4	83.1	82.3	80.1	73.0	36.0	35.5	34.7	34.3	32.4	28.9	21.7
8500.0	93.8	93.7	93.8	93.8	92.8	90.9	99.8	35.4	34.4	32.8	30.2	25.6	17.0	15.5



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +5.75 V, V_{EN} = +5.75 V, I_{DD} = 91 mA, I_{EN} = 2.48 mA @ Temperature = + 105°C

FREQ (GHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure										
200.00	14.7	-33.1	-2.0	-4.8	1.5	1.0	20.5	21.9	5.7	30.5	31.9	32.2	32.0	31.8	31.5	
300.00	19.5	-28.1	-5.9	-9.0	1.2	0.8	20.9	22.1	3.3	29.3	31.7	32.8	33.3	32.9	32.7	
400.00	21.0	-26.6	-11.9	-15.3	1.2	0.7	21.4	22.5	2.5	29.1	33.4	34.1	34.3	34.4	34.1	
500.00	21.3	-26.2	-17.9	-19.5	1.2	0.7	21.7	22.5	2.2	31.6	32.3	34.0	34.3	34.4	33.9	
600.00	21.4	-26.1	-19.1	-18.9	1.1	0.7	21.9	22.6	2.0	37.5	34.9	34.8	35.4	35.2	34.9	
700.00	21.4	-26.2	-17.7	-17.8	1.1	0.7	22.0	22.7	1.9	35.7	34.6	34.8	34.5	34.7	34.5	
800.00	21.4	-26.2	-16.6	-17.3	1.1	0.7	22.1	22.8	1.9	35.6	34.7	34.1	34.4	33.9	34.9	
900.00	21.4	-26.3	-16.0	-17.2	1.1	0.7	22.2	22.9	1.9	31.9	33.2	34.8	34.6	34.5	34.2	
1000.00	21.4	-26.3	-15.7	-17.4	1.1	0.7	22.2	22.9	1.9	34.5	34.7	35.2	35.1	35.0	34.8	
1100.00	21.4	-26.3	-15.7	-17.9	1.1	0.7	22.1	22.9	1.9	33.2	34.7	35.1	34.3	34.6	34.3	
1200.00	21.4	-26.3	-15.8	-18.6	1.2	0.7	22.2	23.0	1.9	32.6	34.1	33.8	34.2	34.3	33.9	
1300.00	21.5	-26.4	-15.9	-19.6	1.2	0.7	22.2	23.1	1.9	31.0	34.2	33.9	33.5	33.8	33.4	
1400.00	21.5	-26.4	-16.1	-20.8	1.2	0.7	22.2	23.0	1.9	33.7	32.8	34.8	34.2	34.1	34.0	
1500.00	21.5	-26.5	-16.1	-22.4	1.2	0.7	22.1	23.1	2.0	32.0	33.4	33.0	33.1	32.8	32.5	
1600.00	21.4	-26.6	-16.0	-24.5	1.2	0.7	22.1	23.1	1.9	33.9	33.5	33.1	33.4	33.5	33.3	
1700.00	21.5	-26.6	-15.9	-25.8	1.2	0.7	22.1	23.3	2.0	33.2	34.3	32.6	33.0	32.7	32.6	
1800.00	21.5	-26.6	-15.7	-27.5	1.2	0.7	22.0	23.2	2.0	32.6	33.3	32.8	32.5	32.8	32.5	
1900.00	21.5	-26.6	-15.3	-27.1	1.2	0.7	21.9	23.2	2.1	32.7	32.2	31.7	32.1	31.9	31.5	
2000.00	21.5	-26.8	-14.9	-25.1	1.2	0.7	21.7	23.0	2.1	30.8	33.8	32.5	32.3	32.3	32.0	
2100.00	21.5	-26.9	-14.3	-23.1	1.2	0.7	21.9	23.3	2.1	32.1	31.7	31.9	32.4	32.1	32.0	
2200.00	21.5	-27.0	-13.8	-21.3	1.2	0.8	21.8	23.2	2.1	31.2	32.1	32.9	32.5	32.6	32.3	
2300.00	21.5	-27.0	-13.2	-19.6	1.2	0.7	21.7	23.3	2.2	30.0	31.4	31.9	32.1	32.0	31.7	
2400.00	21.4	-27.2	-12.6	-18.2	1.2	0.8	21.4	23.2	2.2	28.7	31.9	31.5	31.1	30.8	30.4	
2500.00	21.4	-27.2	-12.1	-17.1	1.2	0.8	21.2	23.2	2.2	30.5	32.1	31.1	30.8	30.8	30.4	
2600.00	21.4	-27.4	-11.6	-16.1	1.2	0.8	21.0	23.1	2.3	29.7	30.4	30.9	30.6	30.6	30.1	
2700.00	21.4	-27.5	-11.2	-15.3	1.2	0.8	20.7	22.8	2.4	30.7	31.4	31.0	31.1	30.9	30.6	
2800.00	21.3	-27.6	-10.8	-14.6	1.2	0.8	20.7	22.7	2.4	32.5	30.8	30.8	30.6	30.6	30.2	
2900.00	21.3	-27.7	-10.4	-14.0	1.2	0.8	20.4	22.5	2.4	29.7	29.4	29.7	29.6	29.4	29.1	
3000.00	21.2	-27.7	-10.1	-13.5	1.2	0.8	20.4	22.6	2.4	28.2	29.4	29.8	29.7	29.6	29.1	
3100.00	21.2	-27.8	-9.8	-13.1	1.2	0.8	20.2	22.6	2.4	28.9	29.8	29.1	29.3	29.1	28.6	
3200.00	21.2	-27.9	-9.5	-12.8	1.2	0.8	20.4	22.7	2.4	29.5	30.4	29.4	29.5	29.5	29.1	
3300.00	21.2	-27.9	-9.4	-12.7	1.2	0.8	20.1	22.6	2.4	29.4	29.5	29.3	29.5	29.3	28.9	
3400.00	21.2	-28.0	-9.2	-12.5	1.2	0.8	20.1	22.4	2.5	29.9	29.4	29.9	30.0	29.8	29.7	
3500.00	21.2	-28.0	-9.2	-12.5	1.2	0.8	20.2	22.5	2.5	29.0	29.6	29.4	29.1	29.1	28.7	
3600.00	21.3	-28.0	-9.2	-12.6	1.2	0.8	20.1	22.4	2.4	28.8	28.9	29.0	29.0	28.9	28.6	
3700.00	21.3	-28.1	-9.2	-12.8	1.2	0.8	20.5	22.7	2.4	29.9	29.6	29.7	30.1	30.0	29.8	
3800.00	21.3	-28.1	-9.3	-13.0	1.3	0.8	20.5	22.7	2.4	28.8	29.8	28.9	28.9	29.0	28.7	
3900.00	21.4	-28.2	-9.4	-13.3	1.3	0.8	20.5	22.7	2.4	30.6	29.5	29.4	29.3	29.2	29.0	
4000.00	21.4	-28.2	-9.6	-13.6	1.3	0.8	20.4	22.7	2.4	29.5	29.2	29.5	29.6	29.6	29.5	
4100.00	21.5	-28.2	-9.9	-14.2	1.3	0.8	20.4	22.8	2.3	29.0	29.0	29.3	29.4	29.3	29.1	
4200.00	21.6	-28.2	-10.1	-14.8	1.3	0.8	20.5	22.8	2.3	29.1	29.8	29.3	29.2	29.1	29.0	
4300.00	21.6	-28.4	-10.4	-15.2	1.3	0.8	20.3	22.7	2.4	28.4	29.1	29.3	29.5	29.4	29.2	
4400.00	21.6	-28.3	-10.9	-15.9	1.3	0.8	20.2	22.6	2.3	29.4	28.7	28.7	29.0	29.0	28.9	
4500.00	21.7	-28.3	-11.2	-16.6	1.3	0.8	20.0	22.5	2.3	28.9	29.3	28.7	29.0	28.9	28.7	
4600.00	21.8	-28.4	-11.7	-17.3	1.3	0.8	19.7	22.3	2.3	28.8	29.4	28.8	28.7	28.8	28.5	
4700.00	21.8	-28.4	-12.3	-18.2	1.3	0.8	19.8	22.4	2.3	28.1	28.4	28.6	28.4	28.4	28.2	
4800.00	21.9	-28.5	-12.6	-18.5	1.3	0.8	20.0	22.4	2.3	28.5	28.9	28.8	28.6	28.9	28.8	
4900.00	21.9	-28.6	-13.3	-19.2	1.3	0.8	19.8	22.2	2.4	28.3	28.7	28.3	28.2	28.2	28.0	
5000.00	22.0	-28.5	-13.6	-20.1	1.3	0.8	19.7	22.0	2.3	27.3	28.6	28.0	28.0	27.9	27.7	
5100.00	22.1	-28.7	-13.9	-20.3	1.3	0.8	20.1	22.2	2.3	28.2	28.3	27.9	27.9	27.9	27.8	
5200.00	22.0	-28.7	-14.4	-20.9	1.3	0.8	20.1	22.2	2.4	27.8	28.2	28.1	28.0	28.1	28.1	
5300.00	22.1	-28.8	-14.2	-20.6	1.3	0.8	19.7	22.0	2.4	27.9	28.6	27.9	27.9	27.9	27.8	
5400.00	22.1	-29.1	-14.1	-20.2	1.4	0.8	19.1	21.7	2.3	27.5	28.2	27.8	27.8	27.8	27.6	
5500.00	22.1	-29.0	-14.0	-20.8	1.4	0.8	18.8	21.4	2.4	26.7	27.8	26.9	27.0	26.9	26.6	
5600.00	22.2	-29.2	-12.9	-19.5	1.4	0.8	18.3	20.9	2.4	27.0	27.7	27.4	27.2	27.1	27.0	
5700.00	22.0	-29.5	-12.5	-18.8	1.4	0.9	18.2	20.6	2.5	26.7	27.5	26.4	26.3	26.2	25.5	
5800.00	22.1	-29.4	-11.8	-18.5	1.4	0.9	18.3	20.3	2.5	26.7	26.9	26.3	26.2	26.1	25.9	
5900.00	22.0	-29.8	-10.5	-16.8	1.4	0.9	18.3	20.1	2.5	26.4	26.5	26.5	26.4	26.3	25.8	
6000.00	21.8	-29.9	-10.3	-16.6	1.4	0.9	18.2	19.8	2.5	26.5	26.6	26.3	26.1	26.0	25.4	
6100.00	21.9	-30.0	-9.2	-15.4	1.4	0.9	18.4	19.8	2.6	26.6	26.5	26.5	26.4	26.4	26.2	
6200.00	21.6	-30.7	-8.3	-14.0	1.5	1.0	18.3	19.6	2.7	26.5	25.6	26.2	26.2	26.0	25.7	
6300.00	21.5	-30.6	-7.9	-13.7	1.5	1.0	18.3	19.5	2.7	26.0	25.9	25.6	25.6	25.5	25.1	
6400.00	21.4	-31.1	-7.0	-12.4	1.5	1.0	18.3	19.4	2.7	25.8	25.9	26.1	26.1	26.0	25.9	
6500.00	21.0	-31.8	-6.4	-11.6	1.6	1.0	18.2	19.4	2.8	25.5	25.1	25.7	25.7	25.6	25.5	
6600.00	20.9	-31.9	-5.9	-11.1	1.6	1.0	18.2	19.3	2.8	25.7	25.3	25.3	25.4	25.3	25.1	
6700.00	20.6	-32.7	-5.2	-10.1	1.6	1.1	17.9	19.0	2.8	25.4	25.1	25.7	25.5	25.4	24.7	
6800.00	20.1	-33.4	-4.9	-9.5	1.8	1.1	17.7									

TEST CONDITIONS: $V_{DD} = +5.75$ V, $V_{EN} = +5.75$ V, $I_{DD} = 91$ mA, $I_{EN} = 2.48$ mA @ Temperature = + 105°C

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	44.5	44.3	44.3	44.3	44.1	44.0	43.6
1000.0	43.4	43.3	43.2	43.1	42.9	42.7	42.3
2000.0	41.7	41.5	41.3	41.1	40.9	40.7	40.5
4000.0	44.1	44.0	44.0	44.0	43.8	43.5	43.2
6000.0	34.2	34.0	33.8	33.6	33.3	33.1	32.9
8000.0	38.7	38.3	38.0	38.0	38.6	40.1	42.5

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +5.75 V, V_{EN} = +5.75 V, I_{DD} = 98 mA, I_{EN} = 2.46 mA @ Temperature = +105°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure (dBm)										
5500.00	21.2	-29.8	-8.6	-8.6	1.4	0.8	18.5	21.1	2.2	28.6	28.0	28.1	28.1	28.0	27.8	
5600.00	21.4	-29.8	-8.4	-8.6	1.4	0.8	18.1	20.8	2.1	27.1	26.8	26.9	26.8	26.6	26.3	
5700.00	21.4	-29.9	-8.6	-8.8	1.4	0.8	18.0	20.6	2.1	26.9	26.8	26.9	26.9	26.9	26.5	
5800.00	21.5	-30.0	-8.4	-8.8	1.4	0.8	18.0	20.4	2.1	27.1	26.8	26.9	26.9	26.8	26.6	
5900.00	21.5	-30.0	-8.6	-9.0	1.4	0.8	18.0	20.1	2.1	26.6	27.1	26.6	26.7	26.6	26.3	
6000.00	21.6	-30.0	-8.3	-8.9	1.4	0.8	17.9	19.8	2.1	25.8	25.6	25.6	25.5	25.3	24.9	
6100.00	21.6	-30.0	-8.5	-9.2	1.4	0.8	18.4	20.0	2.1	26.7	26.9	26.2	26.4	26.4	26.2	
6200.00	21.7	-30.3	-8.2	-9.1	1.4	0.8	18.6	20.0	2.2	26.0	25.8	25.8	26.0	26.0	25.8	
6300.00	21.7	-30.3	-8.4	-9.4	1.4	0.8	18.9	20.2	2.2	26.5	26.7	26.8	26.9	27.1	27.1	
6400.00	21.8	-30.6	-8.1	-9.3	1.4	0.8	19.1	20.3	2.2	26.1	26.6	26.4	26.6	26.8	27.0	
6500.00	21.7	-30.5	-8.3	-9.6	1.4	0.8	19.1	20.2	2.2	26.1	26.6	26.7	26.7	27.0	27.1	
6600.00	21.8	-31.0	-8.0	-9.6	1.5	0.9	19.2	20.4	2.2	27.1	26.5	26.6	26.8	27.0	27.1	
6700.00	21.8	-31.0	-8.3	-10.0	1.5	0.9	19.2	20.4	2.2	25.9	26.5	26.5	26.7	26.8	27.2	
6800.00	21.8	-31.3	-8.0	-10.0	1.5	0.9	19.3	20.4	2.2	26.7	26.3	26.8	26.9	27.1	27.5	
6900.00	21.8	-31.4	-8.3	-10.4	1.6	0.9	19.4	20.5	2.2	26.0	27.2	26.8	26.9	27.2	27.8	
7000.00	21.7	-31.8	-8.0	-10.5	1.6	0.9	19.4	20.4	2.3	26.4	26.5	26.4	26.6	26.8	27.1	
7100.00	21.7	-32.0	-8.3	-11.0	1.7	0.9	19.3	20.3	2.3	26.7	26.4	26.7	26.9	27.1	27.5	
7200.00	21.6	-32.4	-8.0	-11.1	1.7	0.9	19.3	20.3	2.4	26.5	26.3	26.6	26.8	27.1	27.7	
7300.00	21.4	-32.7	-8.3	-11.8	1.8	1.0	19.2	20.2	2.4	25.8	26.4	26.2	26.4	26.7	27.0	
7400.00	21.3	-33.3	-8.0	-12.1	2.0	1.0	19.2	20.2	2.5	26.2	25.9	26.2	26.5	26.8	27.1	
7500.00	21.1	-33.6	-8.2	-13.0	2.1	1.0	19.0	19.9	2.6	26.1	26.4	26.3	26.6	26.8	27.3	
7600.00	20.9	-34.3	-7.7	-13.2	2.2	1.0	18.8	19.7	2.6	26.6	26.3	26.4	26.6	26.9	27.2	
7700.00	20.5	-34.6	-7.8	-14.4	2.4	1.1	18.7	19.6	2.7	25.1	25.3	25.4	25.6	25.8	26.2	
7800.00	20.2	-35.7	-7.2	-14.5	2.7	1.1	18.5	19.4	2.8	25.8	25.8	26.1	26.4	26.6	27.0	
7900.00	19.6	-36.2	-7.1	-15.7	3.0	1.1	18.3	19.2	2.9	25.8	25.8	26.0	26.3	26.7	27.1	
8000.00	19.1	-37.6	-6.3	-15.1	3.6	1.2	18.0	18.9	3.1	25.0	25.1	25.7	25.8	26.2	26.6	
8100.00	18.4	-37.8	-6.1	-15.3	3.8	1.2	17.7	18.5	3.2	25.8	25.1	25.6	25.9	26.2	26.5	
8200.00	17.5	-39.6	-5.2	-13.7	4.7	1.2	17.4	18.1	3.4	24.8	25.1	25.4	25.8	26.0	25.1	
8300.00	16.8	-40.0	-5.0	-13.0	5.1	1.3	17.0	17.7	3.5	24.9	24.6	25.5	25.8	26.2	26.4	
8400.00	15.5	-41.9	-4.2	-11.1	6.5	1.3	16.5	17.2	3.8	26.1	25.8	26.0	26.3	26.7	25.7	
8500.00	14.6	-42.1	-3.9	-10.2	6.9	1.3	15.8	16.5	4.0	24.5	24.7	25.1	25.4	25.6	24.7	

FREQ (MHz)	IP-2 Output Pout = -2	IP-2 Output Pout = +0	IP-2 Output Pout = +2	IP-2 Output Pout = +4	IP-2 Output Pout = +6	IP-2 Output Pout = +8	IP-2 Output Pout = +10
	(dBm)						
5500.0	37.3	37.3	37.1	37.0	36.8	36.5	36.3
6000.0	35.3	35.1	35.0	34.7	34.4	34.2	33.9
7000.0	45.0	44.8	44.7	44.5	44.2	44.0	43.9
8000.0	53.0	52.8	52.6	52.4	52.1	51.9	51.9
8500.0	60.7	60.4	60.2	60.0	59.7	59.7	60.1



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +5.75$ V, $V_{EN} = 0$ V, $I_{DD} = 4$ mA, $I_{EN} = 0$ mA @ Temperature = $+105^{\circ}\text{C}$

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)
					K	Measure	
200.00	-3.8	-3.9	-4.0	-9.2	1.1	0.9	3.8
300.00	-2.4	-2.5	-6.7	-12.0	1.0	0.7	2.6
400.00	-1.8	-1.9	-9.3	-14.1	1.0	0.6	2.0
500.00	-1.5	-1.5	-12.0	-15.7	1.0	0.5	1.8
600.00	-1.3	-1.4	-14.9	-16.9	1.0	0.5	1.5
700.00	-1.3	-1.3	-18.1	-17.7	1.0	0.5	1.6
800.00	-1.2	-1.3	-22.1	-17.8	1.0	0.4	1.6
900.00	-1.2	-1.3	-26.9	-17.5	1.0	0.4	1.5
1000.00	-1.2	-1.3	-30.1	-17.2	1.0	0.4	1.4
1100.00	-1.2	-1.3	-26.3	-16.9	1.0	0.4	1.6
1200.00	-1.2	-1.3	-22.9	-16.6	1.0	0.4	1.6
1300.00	-1.2	-1.3	-20.5	-16.2	1.0	0.4	1.5
1400.00	-1.2	-1.4	-18.7	-15.8	1.0	0.5	1.6
1500.00	-1.3	-1.4	-17.3	-15.5	1.0	0.5	1.4
1600.00	-1.3	-1.5	-16.2	-15.4	1.0	0.5	1.4
1700.00	-1.3	-1.5	-15.4	-15.3	1.0	0.5	1.9
1800.00	-1.4	-1.5	-14.7	-15.2	1.0	0.5	1.9
1900.00	-1.4	-1.6	-14.2	-15.1	1.0	0.5	2.2
2000.00	-1.5	-1.6	-13.7	-15.0	1.0	0.5	2.2
2100.00	-1.5	-1.7	-13.5	-15.2	1.0	0.5	2.0
2200.00	-1.5	-1.7	-13.2	-15.4	1.0	0.5	2.1
2300.00	-1.5	-1.8	-13.1	-15.6	1.0	0.6	2.1
2400.00	-1.6	-1.8	-13.0	-15.8	1.0	0.6	2.1
2500.00	-1.6	-1.9	-12.9	-16.2	1.1	0.6	2.1
2600.00	-1.6	-2.0	-13.0	-16.8	1.1	0.6	2.1
2700.00	-1.6	-2.0	-13.1	-17.5	1.1	0.6	2.3
2800.00	-1.6	-2.0	-13.2	-18.2	1.1	0.6	2.0
2900.00	-1.7	-2.1	-13.4	-18.9	1.1	0.6	2.5
3000.00	-1.7	-2.1	-13.5	-20.0	1.1	0.7	2.1
3100.00	-1.7	-2.1	-13.6	-21.4	1.1	0.7	2.4
3200.00	-1.7	-2.1	-13.7	-23.1	1.1	0.7	2.3
3300.00	-1.7	-2.1	-13.8	-24.6	1.1	0.7	2.8
3400.00	-1.7	-2.1	-13.8	-26.1	1.1	0.7	2.4
3500.00	-1.7	-2.1	-13.8	-26.9	1.1	0.7	2.5
3600.00	-1.7	-2.1	-13.7	-25.5	1.1	0.7	2.6
3700.00	-1.8	-2.1	-13.7	-23.5	1.1	0.7	2.5
3800.00	-1.8	-2.1	-13.4	-21.5	1.1	0.7	2.4
3900.00	-1.8	-2.1	-13.2	-20.0	1.1	0.7	2.5
4000.00	-1.8	-2.2	-13.0	-18.5	1.1	0.7	2.2
4100.00	-1.8	-2.2	-12.7	-17.1	1.1	0.7	2.5
4200.00	-1.9	-2.2	-12.4	-16.1	1.1	0.7	2.4
4300.00	-1.9	-2.2	-12.2	-15.3	1.1	0.6	2.3
4400.00	-1.9	-2.3	-11.9	-14.6	1.1	0.6	2.1
4500.00	-1.9	-2.3	-11.7	-14.0	1.1	0.6	2.1
4600.00	-1.9	-2.3	-11.5	-13.4	1.1	0.6	2.6
4700.00	-2.0	-2.4	-11.4	-13.0	1.1	0.6	2.4
4800.00	-2.0	-2.4	-11.2	-12.7	1.1	0.6	2.3
4900.00	-2.0	-2.4	-11.2	-12.4	1.1	0.6	2.5
5000.00	-2.0	-2.4	-11.0	-12.1	1.1	0.6	2.2
5100.00	-2.0	-2.5	-11.0	-11.9	1.1	0.6	2.4
5200.00	-2.0	-2.5	-11.0	-11.8	1.1	0.6	2.5
5300.00	-1.9	-2.5	-11.0	-11.7	1.1	0.6	2.2
5400.00	-2.0	-2.5	-11.1	-11.6	1.1	0.6	2.1
5500.00	-1.9	-2.5	-11.1	-11.5	1.1	0.6	2.0
5600.00	-1.9	-2.5	-11.3	-11.6	1.1	0.6	2.5
5700.00	-1.9	-2.5	-11.4	-11.7	1.1	0.6	2.2
5800.00	-1.9	-2.5	-11.5	-11.6	1.1	0.6	2.0
5900.00	-1.9	-2.5	-11.9	-11.9	1.1	0.6	1.8
6000.00	-1.8	-2.5	-12.0	-11.8	1.1	0.6	1.9
6100.00	-1.8	-2.4	-12.4	-12.0	1.1	0.6	2.5
6200.00	-1.8	-2.4	-12.8	-12.3	1.1	0.6	2.0
6300.00	-1.7	-2.4	-13.0	-12.4	1.1	0.6	2.5
6400.00	-1.7	-2.4	-13.4	-12.6	1.1	0.6	2.6
6500.00	-1.7	-2.4	-13.7	-12.7	1.1	0.6	1.5
6600.00	-1.7	-2.4	-14.0	-12.8	1.1	0.6	2.3
6700.00	-1.6	-2.4	-14.5	-13.2	1.1	0.6	2.5
6800.00	-1.7	-2.4	-14.8	-13.3	1.1	0.6	2.4
6900.00	-1.7	-2.4	-14.9	-13.4	1.1	0.6	3.0
7000.00	-1.7	-2.4	-15.1	-13.5	1.1	0.6	2.4
7100.00	-1.7	-2.5	-15.0	-13.5	1.1	0.6	2.3
7200.00	-1.7	-2.5	-14.9	-13.5	1.1	0.6	2.9
7300.00	-1.8	-2.5	-14.7	-13.4	1.1	0.6	2.3
7400.00	-1.9	-2.6	-14.1	-13.0	1.1	0.6	3.1
7500.00	-1.9	-2.6	-13.6	-12.8	1.1	0.6	2.7
7600.00	-2.0	-2.8	-13.2	-12.4	1.2	0.7	2.6
7700.00	-2.1	-2.8	-12.3	-11.8	1.2	0.7	2.9
7800.00	-2.2	-2.9	-11.8	-11.4	1.2	0.7	3.5
7900.00	-2.4	-3.1	-11.1	-10.7	1.2	0.7	3.0
8000.00	-2.5	-3.2	-10.2	-10.0	1.2	0.7	3.5

TEST CONDITIONS: $V_{DD} = +5.75$ V, $V_{EN} = 0$ V, $I_{DD} = 4$ mA, $I_{EN} = 0$ mA @ Temperature = +105°C

FREQ (MHz)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
400.0	27.8	26.7	24.8	21.7	16.6	14.3	13.2
1000.0	29.9	28.9	27.0	23.7	17.6	14.0	14.8
2000.0	31.5	30.9	29.6	27.4	23.3	17.0	16.0
4000.0	32.0	31.8	30.9	29.6	27.4	23.0	18.4
6000.0	33.2	32.7	31.6	30.0	26.9	20.8	16.5
8000.0	33.8	33.2	32.2	30.6	27.4	20.6	16.3

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	70.2	69.1	67.2	63.1	53.0	45.3	44.6
1000.0	71.5	71.3	70.4	66.7	54.9	56.7	50.3
2000.0	70.4	70.0	69.3	67.9	63.9	55.6	47.8
4000.0	73.7	73.8	74.0	74.4	75.1	73.4	52.1
6000.0	72.3	72.2	71.9	71.4	69.8	62.6	55.5
8000.0	83.3	83.0	82.8	82.3	80.8	75.3	65.3

FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
400.0	11.2	8.3
1000.0	10.8	8.8
2000.0	12.7	10.3
4000.0	14.7	12.0
6000.0	14.9	12.0
8000.0	15.1	11.5



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +5.75 V, V_{EN} = 0 V, I_{DD} = 4 mA, I_{EN} = 0 mA @ Temperature = +105°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)	FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
					K	Measure				
5500.00	-1.8	-2.4	-20.0	-17.3	1.1	0.7	3.2	5500.0	13.7	10.8
5600.00	-1.7	-2.4	-20.5	-17.1	1.1	0.7	3.0	6000.0	14.2	11.4
5700.00	-1.7	-2.5	-20.4	-16.8	1.1	0.7	2.9	7000.0	15.8	12.3
5800.00	-1.7	-2.5	-19.9	-16.2	1.1	0.7	3.0	8000.0	16.6	11.3
5900.00	-1.7	-2.5	-19.0	-15.7	1.1	0.7	3.1	8500.0	15.4	10.1
6000.00	-1.7	-2.5	-18.2	-15.1	1.1	0.7	2.9			
6100.00	-1.7	-2.5	-17.1	-14.4	1.1	0.7	3.0			
6200.00	-1.7	-2.6	-16.2	-13.8	1.1	0.7	3.0			
6300.00	-1.8	-2.6	-15.2	-13.2	1.1	0.7	3.2			
6400.00	-1.8	-2.7	-14.5	-12.7	1.1	0.7	2.9			
6500.00	-1.8	-2.7	-13.7	-12.1	1.1	0.7	3.0			
6600.00	-1.9	-2.8	-13.0	-11.6	1.1	0.7	3.1			
6700.00	-1.9	-2.8	-12.3	-11.1	1.1	0.7	3.0			
6800.00	-2.0	-2.9	-11.7	-10.7	1.1	0.7	3.2			
6900.00	-2.0	-3.0	-11.0	-10.1	1.1	0.7	3.0			
7000.00	-2.1	-3.1	-10.5	-9.7	1.1	0.7	3.3			
7100.00	-2.2	-3.2	-9.9	-9.3	1.1	0.7	3.2			
7200.00	-2.3	-3.2	-9.4	-8.9	1.1	0.7	3.3			
7300.00	-2.5	-3.4	-8.8	-8.4	1.1	0.7	3.3			
7400.00	-2.6	-3.5	-8.4	-8.1	1.2	0.7	3.4			
7500.00	-2.7	-3.6	-7.9	-7.6	1.2	0.6	3.5			
7600.00	-2.9	-3.8	-7.5	-7.3	1.2	0.6	3.5			
7700.00	-3.1	-3.9	-7.0	-6.9	1.2	0.6	3.5			
7800.00	-3.2	-4.1	-6.6	-6.6	1.2	0.6	3.6			
7900.00	-3.4	-4.3	-6.2	-6.2	1.2	0.6	4.0			
8000.00	-3.6	-4.5	-5.8	-5.9	1.2	0.6	4.3			
8100.00	-3.9	-4.7	-5.4	-5.5	1.2	0.6	3.2			
8200.00	-4.1	-4.9	-5.2	-5.3	1.2	0.6	4.4			
8300.00	-4.3	-5.1	-4.8	-4.9	1.2	0.6	3.9			
8400.00	-4.5	-5.3	-4.6	-4.8	1.2	0.6	4.2			
8500.00	-4.7	-5.5	-4.2	-4.5	1.2	0.6	4.0			

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
5500.0	71.3	71.2	71.1	70.4	68.3	63.1	56.4	34.0	33.7	32.9	32.5	30.2	26.5	20.1
6000.0	75.3	75.3	75.2	74.9	74.3	71.9	64.4	34.6	34.4	33.8	32.0	29.0	23.3	16.7
7000.0	86.0	85.7	85.4	84.9	83.5	79.7	67.4	35.0	34.8	34.3	31.3	28.7	24.6	19.3
8000.0	83.5	83.4	83.3	83.0	82.1	79.3	72.6	34.5	34.3	33.5	33.1	31.2	27.6	19.9
8500.0	93.9	93.9	93.9	93.8	92.0	93.3	112.8	34.3	33.3	31.7	29.1	24.0	16.1	15.5



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +6.0\text{ V}$, $V_{EN} = +6.0\text{ V}$, $I_{DD} = 97\text{ mA}$, $I_{EN} = 2.59\text{ mA}$ @ Temperature = + 105°C

FREQ (GHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure										
200.00	14.8	-33.1	-2.0	-4.9	1.5	1.0	20.9	22.2	5.7	31.3	31.7	32.3	32.0	32.4	32.1	31.9
300.00	19.6	-28.2	-5.9	-9.0	1.2	0.8	21.3	22.5	3.2	32.8	32.3	33.5	33.2	33.5	33.2	33.0
400.00	21.1	-26.7	-12.0	-15.3	1.2	0.7	21.8	22.8	2.5	33.0	33.2	34.5	34.1	34.9	34.4	34.2
500.00	21.4	-26.3	-18.0	-19.2	1.2	0.7	22.1	22.8	2.2	32.5	32.5	35.3	34.4	34.5	34.4	34.2
600.00	21.5	-26.2	-18.8	-18.5	1.1	0.7	22.3	22.9	2.0	33.2	35.8	34.8	36.1	35.5	35.4	35.2
700.00	21.5	-26.3	-17.3	-17.4	1.1	0.7	22.4	23.1	1.9	32.8	35.8	34.1	35.0	35.2	35.0	34.7
800.00	21.5	-26.3	-16.2	-16.9	1.1	0.7	22.5	23.1	1.9	33.3	34.7	35.1	35.0	34.6	34.6	34.4
900.00	21.5	-26.4	-15.7	-16.8	1.1	0.7	22.6	23.3	1.9	34.9	35.2	34.6	34.7	35.1	34.8	34.6
1000.00	21.5	-26.4	-15.5	-17.0	1.1	0.7	22.6	23.3	1.9	36.2	35.6	36.2	35.3	35.4	35.2	35.1
1100.00	21.5	-26.4	-15.5	-17.5	1.1	0.7	22.5	23.2	1.8	32.9	36.1	34.9	34.8	35.0	34.8	34.7
1200.00	21.5	-26.4	-15.6	-18.2	1.2	0.7	22.6	23.4	1.9	33.3	34.7	35.2	34.8	34.7	34.5	34.3
1300.00	21.5	-26.5	-15.7	-19.1	1.2	0.7	22.6	23.4	1.9	33.1	32.5	34.0	34.2	34.0	34.0	33.9
1400.00	21.5	-26.5	-16.0	-20.2	1.2	0.7	22.6	23.3	1.9	33.0	34.0	34.4	34.5	34.6	34.6	34.4
1500.00	21.5	-26.6	-16.1	-21.8	1.2	0.7	22.4	23.4	1.9	36.9	33.3	34.0	33.5	33.4	33.3	33.0
1600.00	21.5	-26.6	-16.1	-23.6	1.2	0.7	22.5	23.5	1.9	32.9	34.4	34.8	33.8	33.9	33.8	33.6
1700.00	21.6	-26.6	-16.0	-25.0	1.2	0.7	22.5	23.6	2.0	33.4	33.7	33.1	33.5	33.2	33.2	33.1
1800.00	21.6	-26.7	-15.9	-26.8	1.2	0.7	22.4	23.5	2.0	33.0	33.0	32.8	33.3	33.1	33.2	33.0
1900.00	21.6	-26.8	-15.6	-27.1	1.2	0.7	22.3	23.5	2.0	34.0	33.7	32.8	32.3	32.2	32.0	
2000.00	21.6	-26.8	-15.2	-25.6	1.2	0.7	22.1	23.4	2.0	31.8	34.4	31.8	33.0	32.9	32.8	32.6
2100.00	21.6	-26.9	-14.7	-23.6	1.2	0.7	22.2	23.6	2.1	29.0	33.1	32.2	32.2	32.5	32.5	32.3
2200.00	21.6	-27.0	-14.1	-21.8	1.2	0.7	22.2	23.5	2.1	32.4	31.7	32.4	33.1	32.9	32.9	32.8
2300.00	21.6	-27.1	-13.5	-20.0	1.2	0.7	22.1	23.6	2.1	30.9	32.6	33.0	32.5	32.6	32.4	32.3
2400.00	21.6	-27.2	-12.9	-18.5	1.2	0.8	21.7	23.5	2.1	31.6	31.5	31.5	31.4	31.3	31.0	
2500.00	21.5	-27.2	-12.4	-17.4	1.2	0.8	21.5	23.5	2.1	32.2	32.1	31.1	31.5	31.2	30.9	
2600.00	21.5	-27.4	-11.9	-16.4	1.2	0.8	21.3	23.3	2.2	32.1	30.9	31.5	31.2	31.0	30.7	
2700.00	21.5	-27.5	-11.5	-15.6	1.2	0.8	21.2	23.1	2.2	30.2	31.1	30.7	31.5	31.4	31.2	
2800.00	21.4	-27.6	-11.0	-14.9	1.2	0.8	21.1	23.0	2.2	31.4	31.8	31.0	31.1	31.0	30.8	
2900.00	21.4	-27.7	-10.6	-14.2	1.2	0.8	20.8	22.8	2.3	30.3	29.9	30.3	30.1	30.0	29.7	
3000.00	21.4	-27.8	-10.3	-13.7	1.2	0.8	20.8	22.8	2.3	30.3	30.7	30.5	30.2	30.2	30.0	29.8
3100.00	21.4	-27.8	-9.9	-13.3	1.2	0.8	20.5	22.8	2.3	29.5	30.5	29.6	29.8	29.6	29.4	29.2
3200.00	21.3	-28.0	-9.7	-13.0	1.2	0.8	20.7	22.9	2.3	29.6	31.1	30.1	29.9	30.0	29.8	29.7
3300.00	21.3	-27.9	-9.5	-12.8	1.2	0.8	20.5	22.7	2.3	31.6	29.8	29.9	30.0	30.0	29.8	29.5
3400.00	21.3	-28.0	-9.4	-12.7	1.2	0.8	20.4	22.6	2.4	30.1	29.9	30.4	30.3	30.4	30.2	30.0
3500.00	21.4	-28.1	-9.3	-12.7	1.2	0.8	20.5	22.6	2.3	28.6	30.0	29.7	29.6	29.5	29.3	
3600.00	21.4	-28.1	-9.3	-12.8	1.2	0.8	20.4	22.5	2.2	28.8	29.7	29.7	29.5	29.5	29.4	
3700.00	21.4	-28.2	-9.3	-12.9	1.2	0.8	20.9	22.8	2.3	30.1	30.2	30.0	30.6	30.4	30.5	
3800.00	21.4	-28.2	-9.4	-13.2	1.2	0.8	20.8	22.8	2.2	30.2	30.3	29.0	29.6	29.5	29.3	
3900.00	21.5	-28.2	-9.5	-13.4	1.2	0.8	20.8	22.8	2.3	28.7	29.8	29.6	29.8	29.7	29.8	
4000.00	21.5	-28.3	-9.7	-13.8	1.2	0.8	20.7	22.9	2.3	29.2	29.8	29.8	30.0	30.0	30.1	
4100.00	21.6	-28.2	-10.0	-14.4	1.2	0.8	20.7	22.9	2.3	29.4	29.5	29.5	29.6	29.7	29.8	
4200.00	21.7	-28.2	-10.2	-15.0	1.2	0.8	20.8	22.9	2.3	29.2	29.9	29.8	29.6	29.7	29.6	
4300.00	21.7	-28.3	-10.5	-15.4	1.3	0.8	20.6	22.8	2.3	30.2	29.2	29.9	30.0	29.8	29.9	
4400.00	21.8	-28.4	-11.0	-16.1	1.3	0.8	20.5	22.7	2.2	28.4	29.0	29.4	29.4	29.6	29.5	
4500.00	21.9	-28.4	-11.3	-16.9	1.3	0.8	20.3	22.6	2.3	28.6	29.3	29.3	29.4	29.4	29.3	
4600.00	21.9	-28.5	-11.8	-17.6	1.3	0.8	20.0	22.4	2.2	28.8	29.3	29.1	29.2	29.3	29.2	
4700.00	21.9	-28.5	-12.3	-18.5	1.3	0.8	20.1	22.5	2.3	28.7	28.5	28.8	28.9	28.9	28.8	
4800.00	22.0	-28.5	-12.6	-18.8	1.3	0.8	20.3	22.5	2.2	28.5	28.9	29.0	29.1	29.3	29.4	
4900.00	22.0	-28.5	-13.4	-19.6	1.3	0.8	20.1	22.3	2.3	28.2	28.2	28.5	28.8	28.7	28.6	
5000.00	22.1	-28.6	-13.7	-20.5	1.3	0.8	20.0	22.1	2.3	28.0	28.4	28.2	28.5	28.4	28.3	
5100.00	22.2	-28.7	-13.9	-20.6	1.3	0.8	20.3	22.3	2.3	28.3	28.8	28.3	28.2	28.4	28.4	
5200.00	22.2	-28.8	-14.5	-21.3	1.3	0.8	20.3	22.3	2.3	28.2	28.4	28.4	28.3	28.5	28.6	
5300.00	22.3	-28.9	-14.2	-20.9	1.3	0.8	19.9	22.0	2.3	27.8	28.5	28.1	28.3	28.3	28.3	
5400.00	22.2	-29.1	-14.2	-20.6	1.4	0.8	19.4	21.7	2.3	28.2	28.3	27.9	28.1	28.2	28.3	
5500.00	22.2	-29.1	-14.1	-21.2	1.3	0.8	19.1	21.5	2.3	26.7	28.1	27.3	27.4	27.5	27.2	
5600.00	22.3	-29.2	-13.0	-19.8	1.3	0.8	18.6	21.0	2.4	27.7	27.7	27.7	27.6	27.6	27.5	
5700.00	22.1	-29.5	-12.6	-19.1	1.4	0.9	18.5	20.7	2.4	26.9	27.7	26.6	26.6	26.5	26.2	
5800.00	22.2	-29.4	-11.9	-18.8	1.4	0.9	18.5	20.4	2.5	27.0	26.5	26.5	26.5	26.4	26.1	
5900.00	22.1	-29.8	-10.6	-17.0	1.4	0.9	18.6	20.3	2.6	27.0	26.8	26.8	26.8	26.7	26.4	
6000.00	21.9	-29.9	-10.3	-16.8	1.4	0.9	18.5	20.0	2.6	26.4	27.3	26.6	26.5	26.5	26.0	
6100.00	22.0	-29.9	-9.2	-15.6	1.4	0.9	18.6	19.9	2.6	27.0	26.8	26.8	26.8	26.7	26.5	
6200.00	21.7	-30.6	-8.3	-14.1	1.5	0.9	18.5	19.7	2.6	26.5	25.8	26.6	26.6	26.5	26.2	
6300.00	21.6	-30.7	-7.9	-13.8	1.5	1.0	18.5	19.6	2.6	26.1	26.0	25.9	26.0	26.0	25.9	
6400.00	21.5	-31.1	-6.9	-12.5	1.5	1.0	18.4	19.5	2.7	26.1	26.2	26.5	26.4	26.4	26.2	
6500.00	21.2	-31.8	-6.4	-11.7	1.6	1.0	18.3	19.4	2.6	26						

TEST CONDITIONS: $V_{DD} = +6.0$ V, $V_{EN} = +6.0$ V, $I_{DD} = 97$ mA, $I_{EN} = 2.59$ mA @ Temperature = + 105°C

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	45.9	45.8	45.8	45.7	45.6	45.4	45.1
1000.0	44.6	44.5	44.4	44.3	44.1	43.9	43.5
2000.0	42.4	42.2	42.1	41.9	41.8	41.6	41.4
4000.0	44.1	44.0	43.9	43.7	43.5	43.4	43.4
6000.0	34.3	34.2	34.0	33.8	33.5	33.3	33.2
8000.0	39.0	38.7	38.4	38.4	38.9	40.3	42.6

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +6.0$ V, $V_{EN} = +6.0$ V, $I_{DD} = 103$ mA, $I_{EN} = 2.58$ mA @ Temperature = +105°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure (dBm)										
5500.00	21.3	-29.8	-8.5	-8.6	1.4	0.8	18.8	21.2	2.2	27.8	28.2	28.4	28.4	28.5	28.3	
5600.00	21.5	-29.8	-8.3	-8.6	1.4	0.8	18.4	20.9	2.1	26.6	27.3	26.9	27.1	27.1	26.8	
5700.00	21.4	-29.9	-8.6	-8.8	1.4	0.8	18.3	20.6	2.1	27.2	27.0	27.2	27.3	27.3	27.1	
5800.00	21.6	-29.9	-8.3	-8.8	1.4	0.8	18.3	20.5	2.1	27.5	27.1	27.2	27.2	27.3	27.1	
5900.00	21.6	-29.9	-8.5	-9.0	1.4	0.8	18.2	20.2	2.1	26.8	26.6	26.7	26.9	27.0	26.8	
6000.00	21.7	-30.0	-8.2	-8.9	1.4	0.8	18.2	19.9	2.1	25.7	26.0	25.8	25.9	25.9	25.5	
6100.00	21.7	-30.1	-8.4	-9.2	1.4	0.8	18.6	20.1	2.1	26.8	25.9	26.4	26.6	26.8	26.7	
6200.00	21.8	-30.3	-8.1	-9.1	1.4	0.8	18.8	20.1	2.1	25.9	25.8	26.1	26.2	26.4	26.3	
6300.00	21.8	-30.3	-8.3	-9.3	1.4	0.8	19.1	20.3	2.2	26.8	26.5	26.8	27.0	27.2	27.4	
6400.00	21.9	-30.5	-8.0	-9.2	1.4	0.8	19.2	20.4	2.1	26.2	27.3	26.6	26.9	27.1	27.4	
6500.00	21.8	-30.6	-8.2	-9.6	1.4	0.8	19.2	20.4	2.2	26.3	26.4	26.9	27.0	27.2	27.5	
6600.00	21.9	-30.9	-7.9	-9.5	1.5	0.8	19.4	20.5	2.2	26.9	26.6	26.9	27.0	27.2	27.6	
6700.00	21.9	-31.1	-8.2	-9.9	1.5	0.9	19.4	20.5	2.2	26.3	26.4	26.6	26.9	27.1	27.4	
6800.00	21.9	-31.4	-7.9	-9.9	1.5	0.9	19.5	20.5	2.2	26.8	26.3	26.8	27.2	27.4	27.9	
6900.00	21.8	-31.4	-8.1	-10.3	1.6	0.9	19.5	20.6	2.2	26.9	26.5	26.8	27.1	27.4	28.1	
7000.00	21.8	-31.8	-7.9	-10.3	1.6	0.9	19.5	20.5	2.3	26.3	25.9	26.6	26.7	27.1	27.7	
7100.00	21.7	-31.9	-8.1	-10.9	1.7	0.9	19.4	20.4	2.3	26.6	26.8	26.8	27.0	27.4	28.0	
7200.00	21.7	-32.5	-7.9	-11.0	1.7	0.9	19.4	20.4	2.3	26.5	26.5	26.8	27.0	27.3	28.0	
7300.00	21.5	-32.8	-8.1	-11.6	1.8	1.0	19.3	20.3	2.4	25.8	25.9	26.3	26.6	26.9	27.3	
7400.00	21.4	-33.4	-7.8	-11.9	1.9	1.0	19.3	20.3	2.5	25.7	26.0	26.4	26.5	26.9	27.7	
7500.00	21.2	-33.6	-8.0	-12.8	2.1	1.0	19.1	20.0	2.5	25.7	25.9	26.2	26.7	27.0	27.5	
7600.00	20.9	-34.6	-7.6	-13.0	2.3	1.0	18.9	19.8	2.6	26.5	26.4	26.6	26.9	27.1	27.8	
7700.00	20.6	-34.9	-7.6	-14.2	2.4	1.1	18.7	19.6	2.7	25.7	25.2	25.5	25.8	26.1	26.5	
7800.00	20.2	-36.1	-7.0	-14.4	2.8	1.1	18.6	19.5	2.8	26.1	26.0	26.1	26.4	26.9	27.5	
7900.00	19.7	-36.5	-7.0	-15.6	3.1	1.1	18.4	19.2	2.9	25.8	25.7	26.1	26.5	26.9	27.3	
8000.00	19.1	-37.9	-6.2	-15.1	3.6	1.2	18.1	18.9	3.1	25.2	25.1	25.5	26.0	26.4	26.8	
8100.00	18.4	-38.3	-6.0	-15.4	4.0	1.2	17.8	18.5	3.2	25.4	25.8	25.7	26.0	26.5	26.9	
8200.00	17.5	-40.1	-5.2	-13.9	5.0	1.3	17.4	18.1	3.4	24.8	25.2	25.2	25.7	26.0	26.3	
8300.00	16.7	-40.2	-4.9	-13.2	5.2	1.3	17.0	17.7	3.6	25.2	25.2	25.6	25.8	26.4	26.6	
8400.00	15.4	-42.0	-4.2	-11.3	6.6	1.3	16.5	17.1	3.8	25.7	25.5	26.0	26.4	26.9	27.0	
8500.00	14.5	-42.6	-3.8	-10.3	7.3	1.3	15.9	16.5	4.0	24.3	24.5	25.4	25.5	25.8	24.8	

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
5500.0	37.4	37.4	37.3	37.1	36.9	36.8	36.6
6000.0	35.3	35.2	35.1	34.8	34.6	34.4	34.2
7000.0	45.0	44.9	44.7	44.5	44.3	44.2	44.2
8000.0	53.0	52.9	52.7	52.5	52.3	52.1	52.2
8500.0	60.7	60.5	60.3	60.0	59.9	59.9	60.3



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3/26/2024

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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +6.0$ V, $V_{EN} = 0$ V, $I_{DD} = 4$ mA, $I_{EN} = 0$ mA @ Temperature = $+105^{\circ}\text{C}$

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	K	Stability Measure	Noise Figure (dB)
200.00	-3.8	-3.9	-4.0	-9.2	1.1	0.9	4.0
300.00	-2.4	-2.5	-6.7	-12.0	1.0	0.7	2.8
400.00	-1.8	-1.9	-9.3	-14.1	1.0	0.6	2.1
500.00	-1.5	-1.5	-12.0	-15.7	1.0	0.5	1.7
600.00	-1.3	-1.4	-14.9	-16.9	1.0	0.5	1.7
700.00	-1.3	-1.3	-18.1	-17.7	1.0	0.5	1.5
800.00	-1.2	-1.3	-22.1	-17.8	1.0	0.4	1.7
900.00	-1.2	-1.3	-26.9	-17.6	1.0	0.4	1.5
1000.00	-1.2	-1.3	-30.1	-17.2	1.0	0.4	1.3
1100.00	-1.2	-1.3	-26.4	-16.9	1.0	0.4	1.4
1200.00	-1.2	-1.3	-22.9	-16.6	1.0	0.4	1.5
1300.00	-1.2	-1.3	-20.5	-16.2	1.0	0.4	1.4
1400.00	-1.2	-1.4	-18.7	-15.8	1.0	0.4	1.5
1500.00	-1.3	-1.4	-17.3	-15.5	1.0	0.5	1.7
1600.00	-1.3	-1.5	-16.2	-15.4	1.0	0.5	1.5
1700.00	-1.3	-1.5	-15.4	-15.3	1.0	0.5	1.6
1800.00	-1.4	-1.6	-14.7	-15.2	1.0	0.5	1.7
1900.00	-1.4	-1.6	-14.2	-15.1	1.0	0.5	1.5
2000.00	-1.5	-1.7	-13.7	-14.9	1.0	0.5	1.6
2100.00	-1.5	-1.7	-13.5	-15.1	1.0	0.5	2.0
2200.00	-1.5	-1.7	-13.2	-15.4	1.0	0.5	2.1
2300.00	-1.5	-1.8	-13.1	-15.6	1.0	0.6	2.1
2400.00	-1.6	-1.8	-13.0	-15.8	1.0	0.6	2.1
2500.00	-1.6	-1.9	-12.9	-16.2	1.1	0.6	2.2
2600.00	-1.6	-1.9	-13.0	-16.8	1.1	0.6	2.2
2700.00	-1.6	-2.0	-13.1	-17.5	1.1	0.6	2.2
2800.00	-1.6	-2.0	-13.2	-18.2	1.1	0.6	2.3
2900.00	-1.7	-2.1	-13.4	-18.9	1.1	0.6	2.3
3000.00	-1.7	-2.1	-13.5	-20.0	1.1	0.7	2.2
3100.00	-1.7	-2.1	-13.6	-21.4	1.1	0.7	2.4
3200.00	-1.7	-2.1	-13.7	-23.1	1.1	0.7	2.4
3300.00	-1.7	-2.1	-13.8	-24.5	1.1	0.7	2.4
3400.00	-1.7	-2.1	-13.8	-26.1	1.1	0.7	2.5
3500.00	-1.7	-2.1	-13.8	-26.9	1.1	0.7	2.5
3600.00	-1.7	-2.1	-13.7	-25.5	1.1	0.7	2.3
3700.00	-1.8	-2.1	-13.6	-23.4	1.1	0.7	2.6
3800.00	-1.8	-2.1	-13.4	-21.6	1.1	0.7	2.3
3900.00	-1.8	-2.1	-13.2	-20.0	1.1	0.7	2.8
4000.00	-1.8	-2.2	-13.0	-18.5	1.1	0.7	2.4
4100.00	-1.8	-2.2	-12.7	-17.2	1.1	0.7	2.3
4200.00	-1.9	-2.2	-12.4	-16.1	1.1	0.7	2.3
4300.00	-1.9	-2.2	-12.2	-15.3	1.1	0.6	2.2
4400.00	-1.9	-2.3	-11.9	-14.6	1.1	0.6	2.0
4500.00	-1.9	-2.3	-11.7	-14.0	1.1	0.6	2.3
4600.00	-1.9	-2.3	-11.5	-13.4	1.1	0.6	2.8
4700.00	-1.9	-2.4	-11.4	-13.0	1.1	0.6	2.4
4800.00	-2.0	-2.4	-11.2	-12.7	1.1	0.6	2.2
4900.00	-2.0	-2.4	-11.2	-12.4	1.1	0.6	1.9
5000.00	-2.0	-2.4	-11.0	-12.1	1.1	0.6	2.1
5100.00	-2.0	-2.5	-11.0	-11.9	1.1	0.6	2.5
5200.00	-2.0	-2.5	-10.9	-11.8	1.1	0.6	2.2
5300.00	-1.9	-2.5	-11.0	-11.7	1.1	0.6	1.9
5400.00	-2.0	-2.5	-11.1	-11.6	1.1	0.6	1.7
5500.00	-1.9	-2.5	-11.1	-11.5	1.1	0.6	2.1
5600.00	-1.9	-2.5	-11.3	-11.6	1.1	0.6	2.4
5700.00	-1.9	-2.5	-11.4	-11.6	1.1	0.6	2.2
5800.00	-1.9	-2.5	-11.5	-11.6	1.1	0.6	2.0
5900.00	-1.9	-2.5	-11.9	-11.9	1.1	0.6	1.7
6000.00	-1.8	-2.5	-12.0	-11.8	1.1	0.6	2.1
6100.00	-1.8	-2.4	-12.4	-12.0	1.1	0.6	2.2
6200.00	-1.8	-2.4	-12.8	-12.3	1.1	0.6	2.3
6300.00	-1.7	-2.4	-13.0	-12.3	1.1	0.6	2.1
6400.00	-1.7	-2.4	-13.4	-12.6	1.1	0.6	2.8
6500.00	-1.7	-2.4	-13.7	-12.7	1.1	0.6	2.4
6600.00	-1.7	-2.4	-14.0	-12.8	1.1	0.6	2.5
6700.00	-1.6	-2.4	-14.5	-13.2	1.1	0.6	2.3
6800.00	-1.7	-2.4	-14.8	-13.3	1.1	0.6	2.5
6900.00	-1.7	-2.4	-14.8	-13.3	1.1	0.6	2.5
7000.00	-1.7	-2.4	-15.1	-13.5	1.1	0.6	2.3
7100.00	-1.7	-2.5	-15.0	-13.5	1.1	0.6	2.6
7200.00	-1.7	-2.5	-14.9	-13.5	1.1	0.6	2.7
7300.00	-1.8	-2.5	-14.7	-13.4	1.1	0.6	2.7
7400.00	-1.9	-2.6	-14.1	-13.0	1.1	0.6	2.9
7500.00	-1.9	-2.6	-13.6	-12.8	1.1	0.6	3.0
7600.00	-2.0	-2.8	-13.2	-12.4	1.2	0.7	2.8
7700.00	-2.1	-2.8	-12.3	-11.8	1.2	0.7	3.2
7800.00	-2.2	-2.9	-11.8	-11.4	1.2	0.7	2.2
7900.00	-2.4	-3.1	-11.1	-10.7	1.2	0.7	3.1
8000.00	-2.5	-3.2	-10.2	-10.0	1.2	0.7	3.6



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IF/RF MICROWAVE COMPONENTS



REV. OR

TSY-83LN+

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TEST CONDITIONS: $V_{DD} = +6.0$ V, $V_{EN} = 0$ V, $I_{DD} = 4$ mA, $I_{EN} = 0$ mA @ Temperature = $+105^\circ\text{C}$

FREQ (MHz)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
400.0	27.5	26.4	24.6	21.5	16.4	14.2	13.0
1000.0	29.6	28.6	26.7	23.4	17.3	13.9	14.5
2000.0	31.1	30.5	29.2	27.0	22.9	16.8	16.0
4000.0	31.6	31.1	30.5	29.2	26.7	22.3	18.2
6000.0	33.1	32.4	31.3	29.7	26.5	20.3	16.4
8000.0	33.1	32.7	31.8	30.1	26.9	19.6	16.2

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	70.0	68.9	66.9	62.7	52.4	45.0	44.2
1000.0	71.5	71.2	70.1	66.0	53.8	58.3	49.8
2000.0	70.1	69.8	69.0	67.5	63.2	55.2	47.1
4000.0	73.8	74.0	74.1	74.4	75.2	73.0	51.1
6000.0	72.4	72.2	72.1	71.6	69.9	61.8	55.2
8000.0	83.2	82.9	82.8	82.2	80.6	74.6	65.0

FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
400.0	11.0	8.2
1000.0	10.8	8.7
2000.0	12.5	10.1
4000.0	14.5	11.9
6000.0	14.7	11.9
8000.0	14.9	11.4



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +6.0 V, V_{EN} = 0 V, I_{DD} = 4 mA, I_{EN} = 0 mA @ Temperature = +105°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)	FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
					K	Measure				
5500.00	-1.8	-2.5	-20.0	-17.3	1.1	0.7	3.1	5500.0	13.5	10.6
5600.00	-1.7	-2.4	-20.4	-17.1	1.1	0.7	2.9	6000.0	14.0	11.2
5700.00	-1.7	-2.5	-20.3	-16.8	1.1	0.7	2.7	7000.0	15.6	12.1
5800.00	-1.7	-2.5	-19.8	-16.2	1.1	0.7	2.8	8000.0	16.4	11.1
5900.00	-1.7	-2.5	-18.9	-15.7	1.1	0.7	2.9	8500.0	15.4	9.9
6000.00	-1.7	-2.5	-18.2	-15.1	1.1	0.7	3.1			
6100.00	-1.7	-2.6	-17.1	-14.4	1.1	0.7	3.0			
6200.00	-1.7	-2.6	-16.2	-13.8	1.1	0.7	3.2			
6300.00	-1.8	-2.6	-15.2	-13.2	1.1	0.7	3.0			
6400.00	-1.8	-2.7	-14.5	-12.6	1.1	0.7	3.0			
6500.00	-1.8	-2.7	-13.7	-12.1	1.1	0.7	3.1			
6600.00	-1.9	-2.8	-13.0	-11.6	1.1	0.7	3.0			
6700.00	-1.9	-2.8	-12.3	-11.0	1.1	0.7	3.2			
6800.00	-2.0	-2.9	-11.7	-10.6	1.1	0.7	3.2			
6900.00	-2.1	-3.0	-11.0	-10.1	1.1	0.7	3.2			
7000.00	-2.1	-3.1	-10.5	-9.7	1.1	0.7	3.1			
7100.00	-2.2	-3.2	-9.9	-9.3	1.1	0.7	2.9			
7200.00	-2.3	-3.2	-9.4	-8.9	1.1	0.7	3.3			
7300.00	-2.5	-3.4	-8.8	-8.4	1.2	0.7	3.4			
7400.00	-2.6	-3.5	-8.4	-8.1	1.2	0.7	3.3			
7500.00	-2.7	-3.6	-7.9	-7.6	1.2	0.7	3.6			
7600.00	-2.9	-3.8	-7.5	-7.3	1.2	0.6	3.5			
7700.00	-3.1	-3.9	-7.0	-6.9	1.2	0.6	3.8			
7800.00	-3.2	-4.1	-6.6	-6.6	1.2	0.6	3.4			
7900.00	-3.4	-4.3	-6.2	-6.2	1.2	0.6	3.9			
8000.00	-3.6	-4.5	-5.8	-5.9	1.2	0.6	4.2			
8100.00	-3.9	-4.7	-5.4	-5.5	1.2	0.6	4.5			
8200.00	-4.1	-4.9	-5.2	-5.3	1.2	0.6	4.2			
8300.00	-4.3	-5.1	-4.8	-4.9	1.2	0.6	3.8			
8400.00	-4.5	-5.3	-4.6	-4.8	1.2	0.6	3.8			
8500.00	-4.7	-5.5	-4.2	-4.4	1.2	0.6	4.1			

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
5500.0	71.6	71.5	71.3	70.6	68.3	62.8	55.6	33.5	33.1	32.4	31.9	29.7	25.8	19.4
6000.0	75.1	75.2	75.1	74.8	74.2	71.5	63.6	34.5	34.1	33.3	31.4	28.5	22.5	16.5
7000.0	85.9	85.7	85.3	84.7	83.3	79.0	66.5	34.4	34.3	33.7	30.8	28.2	24.0	18.9
8000.0	83.5	83.4	83.2	82.9	82.0	78.9	72.4	34.3	33.9	33.0	32.7	30.6	26.9	19.2
8500.0	93.9	94.1	94.1	93.8	91.7	96.0	107.1	33.5	32.6	31.2	28.5	23.4	15.7	15.4



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +6.25 V, V_{EN} = +6.25 V, I_{DD} = 103 mA, I_{EN} = 2.71 mA @ Temperature = + 105°C

FREQ (GHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure										
200.00	14.8	-33.0	-2.0	-4.9	1.5	1.0	21.2	22.5	5.8	31.7	32.1	33.6	32.3	32.5	32.3	32.0
300.00	19.6	-28.2	-5.9	-9.0	1.2	0.8	21.7	22.8	2.9	34.6	32.6	33.0	33.3	33.9	33.5	33.3
400.00	21.1	-26.7	-12.1	-15.3	1.2	0.7	22.2	23.1	2.1	33.5	32.9	34.2	34.1	35.1	34.9	34.4
500.00	21.5	-26.4	-18.0	-19.1	1.2	0.7	22.5	23.2	1.9	30.3	33.3	35.9	34.8	34.9	34.7	34.4
600.00	21.5	-26.3	-18.5	-18.3	1.1	0.7	22.7	23.3	1.8	32.4	35.1	35.2	35.1	35.5	35.6	35.3
700.00	21.5	-26.3	-17.0	-17.2	1.1	0.7	22.8	23.4	1.7	35.2	33.4	35.1	34.7	35.2	35.2	35.0
800.00	21.5	-26.4	-16.0	-16.7	1.1	0.7	22.9	23.5	1.7	34.6	34.8	34.4	36.1	34.8	34.9	34.6
900.00	21.5	-26.4	-15.5	-16.6	1.1	0.7	23.0	23.6	1.7	35.2	34.6	34.9	34.8	35.3	35.0	34.9
1000.00	21.6	-26.4	-15.2	-16.8	1.1	0.7	23.0	23.6	1.7	36.2	34.3	35.3	35.4	35.5	35.6	35.4
1100.00	21.6	-26.5	-15.3	-17.2	1.2	0.7	22.9	23.6	1.7	33.3	34.8	34.3	34.2	35.2	35.3	35.0
1200.00	21.6	-26.6	-15.4	-17.9	1.2	0.7	23.0	23.7	1.7	33.0	34.4	34.3	35.0	34.9	34.8	34.7
1300.00	21.6	-26.5	-15.6	-18.8	1.2	0.7	23.0	23.8	1.8	34.2	34.3	34.3	34.0	34.5	34.4	34.2
1400.00	21.6	-26.6	-15.9	-19.8	1.2	0.7	22.9	23.7	1.8	32.9	33.6	34.9	34.4	34.7	35.0	34.8
1500.00	21.6	-26.6	-16.1	-21.3	1.2	0.7	22.8	23.7	1.9	32.5	33.0	33.7	33.6	33.8	33.6	33.4
1600.00	21.6	-26.7	-16.1	-23.1	1.2	0.7	22.8	23.8	2.0	32.8	33.6	34.2	33.7	34.3	34.2	34.0
1700.00	21.6	-26.8	-16.1	-24.3	1.2	0.7	22.8	23.9	1.9	32.1	33.1	33.3	33.3	33.6	33.6	33.5
1800.00	21.7	-26.8	-16.1	-26.2	1.2	0.7	22.8	23.9	2.0	33.2	32.9	33.4	33.9	33.5	33.6	33.4
1900.00	21.7	-26.8	-15.8	-26.7	1.2	0.7	22.7	23.8	2.1	32.1	33.3	32.7	33.4	32.6	32.7	32.4
2000.00	21.7	-26.9	-15.5	-25.6	1.2	0.7	22.4	23.7	2.1	34.3	32.6	33.4	33.3	33.4	33.2	33.0
2100.00	21.7	-27.0	-14.9	-23.9	1.2	0.7	22.6	23.9	2.0	31.9	32.8	32.8	33.5	32.9	32.9	32.7
2200.00	21.7	-27.1	-14.4	-22.1	1.2	0.7	22.5	23.8	2.0	32.0	32.9	33.0	33.6	33.4	33.2	32.8
2300.00	21.7	-27.1	-13.8	-20.3	1.2	0.7	22.5	23.9	2.1	31.6	32.0	32.8	33.2	32.9	32.9	32.8
2400.00	21.6	-27.2	-13.2	-18.8	1.2	0.8	22.0	23.8	2.1	31.2	32.4	31.8	32.7	31.8	31.7	31.5
2500.00	21.6	-27.3	-12.6	-17.6	1.2	0.8	21.9	23.7	2.1	30.6	32.4	32.2	32.0	31.9	31.6	31.4
2600.00	21.6	-27.4	-12.1	-16.6	1.2	0.8	21.6	23.6	2.1	30.5	30.4	31.9	32.0	31.5	31.2	31.0
2700.00	21.6	-27.5	-11.7	-15.8	1.2	0.8	21.5	23.3	2.2	30.9	31.1	31.9	31.5	31.9	31.7	31.7
2800.00	21.5	-27.6	-11.2	-15.0	1.2	0.8	21.4	23.2	2.2	30.8	31.8	31.3	31.4	31.6	31.5	31.3
2900.00	21.5	-27.8	-10.8	-14.4	1.2	0.8	21.1	23.0	2.2	30.1	30.1	30.8	30.5	30.5	30.2	30.2
3000.00	21.4	-27.8	-10.4	-13.8	1.2	0.8	21.0	23.0	2.2	31.3	31.0	30.8	30.5	30.6	30.5	30.2
3100.00	21.4	-27.8	-10.1	-13.4	1.2	0.8	20.7	22.8	2.2	30.6	30.8	30.4	30.1	30.1	29.8	29.8
3200.00	21.4	-27.9	-9.8	-13.1	1.2	0.8	21.0	23.0	2.2	30.1	30.5	30.3	30.9	30.5	30.4	30.2
3300.00	21.4	-28.0	-9.6	-13.0	1.2	0.8	20.8	22.9	2.2	29.9	30.7	30.0	30.7	30.3	30.3	30.0
3400.00	21.4	-28.1	-9.5	-12.8	1.2	0.8	20.7	22.7	2.3	29.7	29.9	30.6	30.6	30.7	30.5	30.5
3500.00	21.4	-28.1	-9.4	-12.8	1.2	0.8	20.7	22.7	2.3	29.5	30.3	30.1	30.7	30.1	29.8	29.8
3600.00	21.5	-28.1	-9.4	-12.9	1.2	0.8	20.7	22.6	2.2	29.3	30.0	29.7	29.9	29.9	29.7	29.7
3700.00	21.5	-28.2	-9.4	-13.1	1.2	0.8	21.1	22.9	2.2	30.5	30.3	30.6	30.9	30.9	30.9	30.9
3800.00	21.5	-28.2	-9.5	-13.3	1.2	0.8	21.1	22.9	2.1	28.9	30.6	29.8	30.8	29.9	29.9	29.8
3900.00	21.6	-28.2	-9.6	-13.6	1.2	0.8	21.0	22.9	2.1	30.2	30.6	29.8	30.3	30.1	30.2	30.1
4000.00	21.6	-28.3	-9.7	-14.0	1.2	0.8	20.9	22.9	2.2	29.7	30.0	30.3	30.3	30.4	30.6	30.5
4100.00	21.7	-28.2	-10.0	-14.5	1.2	0.8	20.9	22.9	2.2	28.5	29.4	30.0	30.7	30.1	30.2	30.1
4200.00	21.8	-28.3	-10.2	-15.1	1.2	0.8	21.0	22.9	2.2	30.4	30.3	30.1	29.7	29.9	30.1	30.1
4300.00	21.8	-28.4	-10.5	-15.5	1.3	0.8	20.8	22.8	2.2	30.5	30.5	30.0	29.8	30.2	30.3	30.3
4400.00	21.9	-28.4	-11.0	-16.3	1.3	0.8	20.8	22.7	2.2	29.6	29.8	29.7	29.8	29.9	29.9	29.9
4500.00	21.9	-28.3	-11.3	-17.0	1.3	0.8	20.5	22.6	2.1	29.8	28.8	29.5	30.1	29.8	29.9	29.8
4600.00	22.0	-28.4	-11.8	-17.8	1.3	0.8	20.2	22.4	2.2	30.9	29.7	29.7	29.1	29.6	29.7	29.6
4700.00	22.0	-28.5	-12.3	-18.7	1.3	0.8	20.3	22.5	2.2	28.8	29.0	29.1	29.3	29.4	29.3	29.3
4800.00	22.1	-28.6	-12.6	-19.0	1.3	0.8	20.5	22.6	2.2	29.8	29.4	29.5	28.9	29.8	29.9	29.9
4900.00	22.1	-28.6	-13.4	-19.8	1.3	0.8	20.3	22.3	2.3	28.7	29.1	28.9	29.7	29.1	29.2	29.1
5000.00	22.2	-28.6	-13.7	-20.7	1.3	0.8	20.1	22.1	2.2	27.8	28.8	28.5	29.3	28.8	28.8	28.8
5100.00	22.3	-28.7	-13.9	-20.8	1.3	0.8	20.5	22.3	2.2	28.1	28.8	28.5	29.2	28.7	28.9	28.8
5200.00	22.3	-28.8	-14.5	-21.4	1.3	0.8	20.5	22.3	2.2	28.3	28.5	28.4	29.3	28.8	29.0	29.1
5300.00	22.4	-28.8	-14.2	-21.1	1.3	0.8	20.1	22.1	2.3	27.7	28.7	28.4	28.8	28.7	28.8	28.8
5400.00	22.3	-29.1	-14.2	-20.8	1.3	0.8	19.6	21.8	2.2	27.7	28.3	28.4	28.3	28.6	28.7	28.6
5500.00	22.3	-29.0	-14.2	-21.4	1.3	0.8	19.3	21.5	2.2	27.2	28.1	27.6	28.6	27.9	27.7	27.7
5600.00	22.4	-29.2	-13.0	-19.8	1.3	0.8	18.8	21.0	2.2	27.2	28.5	28.0	27.3	27.9	27.7	27.7
5700.00	22.2	-29.5	-12.6	-19.2	1.4	0.9	18.7	20.7	2.2	27.2	27.9	26.8	26.8	27.0	27.0	26.7
5800.00	22.3	-29.4	-11.9	-18.8	1.4	0.9	18.7	20.5	2.3	26.5	27.2	26.9	27.0	26.9	26.9	26.6
5900.00	22.2	-29.9	-10.6	-17.0	1.4	0.9	18.8	20.4	2.3	26.9	27.3	27.2	27.3	27.1	27.1	26.9
6000.00	22.1	-29.9	-10.3	-16.9	1.4	0.9	18.6	20.0	2.3	26.5	27.2	26.8	26.9	26.8	26.6	26.6
6100.00	22.1	-30.0	-9.2	-15.6	1.4	0.9	18.7	20.0	2.3	27.3	27.0	27.0	27.0	27.2	27.2	27.0
6200.00	21.9	-30.8	-8.2	-14.1	1.5	0.9	18.6	19.8	2.4	26.6	26.4	26.8	26.4	27.0	27.0	26.8
6300.00	21.7	-30.6	-7.9	-13.8	1.5	1.0	18.6	19.7	2.5	26.2	26.5	26.3	26.7	26.4	26.4	26.1
6400.00	21.6	-31.1	-6.9	-12.5	1.5	1.0	18.5	19.6	2.5	27.0						

TEST CONDITIONS: $V_{DD} = +6.25$ V, $V_{EN} = +6.25$ V, $I_{DD} = 103$ mA, $I_{EN} = 2.71$ mA @ Temperature = + 105°C

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	47.3	47.2	47.2	47.1	47.0	46.8	46.5
1000.0	45.7	45.6	45.6	45.5	45.4	45.1	44.8
2000.0	43.0	42.8	42.7	42.6	42.5	42.3	42.3
4000.0	44.0	43.9	43.8	43.7	43.6	43.5	43.6
6000.0	34.3	34.1	34.1	33.9	33.7	33.6	33.5
8000.0	39.2	39.0	38.8	38.8	39.2	40.5	42.8



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +6.25 V, V_{EN} = +6.25 V, I_{DD} = 109 mA, I_{EN} = 2.71 mA @ Temperature = +10°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	Noise Figure (dB)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
					K	Measure (dBm)										
5500.00	21.4	29.8	-8.5	-8.7	1.4	0.8	19.0	21.2	2.2	28.5	28.8	28.7	28.7	28.8	28.6	
5600.00	21.5	29.8	-8.3	-8.7	1.4	0.8	18.7	20.9	2.1	27.4	26.9	27.2	27.4	27.5	27.2	
5700.00	21.5	29.8	-8.5	-8.8	1.4	0.8	18.6	20.7	2.1	27.3	27.5	27.6	27.5	27.6	27.4	
5800.00	21.7	30.1	-8.2	-8.8	1.4	0.8	18.6	20.5	2.1	27.1	26.9	27.3	27.4	27.5	27.5	
5900.00	21.6	29.9	-8.5	-9.0	1.4	0.8	18.5	20.2	2.1	27.1	27.1	27.2	27.3	27.4	27.2	
6000.00	21.8	30.2	-8.1	-8.9	1.4	0.8	18.4	19.9	2.1	26.2	25.5	26.0	26.2	26.2	25.9	
6100.00	21.8	30.1	-8.3	-9.1	1.4	0.8	18.8	20.2	2.1	26.6	26.7	26.8	26.9	27.1	27.1	
6200.00	21.9	30.4	-8.0	-9.0	1.4	0.8	18.9	20.2	2.1	25.9	26.3	26.4	26.6	26.7	26.8	
6300.00	21.9	30.3	-8.2	-9.3	1.4	0.8	19.2	20.4	2.1	27.0	26.5	27.1	27.3	27.5	27.8	
6400.00	21.9	30.6	-7.9	-9.1	1.4	0.8	19.4	20.5	2.1	27.0	26.6	27.0	27.1	27.4	27.6	
6500.00	21.9	30.7	-8.1	-9.5	1.4	0.8	19.3	20.4	2.2	26.7	27.1	26.9	27.2	27.5	27.8	
6600.00	22.0	30.9	-7.8	-9.4	1.4	0.8	19.4	20.5	2.2	27.2	26.8	27.1	27.2	27.5	27.9	
6700.00	21.9	31.0	-8.1	-9.8	1.5	0.9	19.5	20.5	2.2	26.5	26.8	26.8	27.1	27.5	27.8	
6800.00	22.0	31.3	-7.8	-9.7	1.5	0.9	19.5	20.6	2.2	26.8	26.7	27.0	27.3	27.6	28.0	
6900.00	21.9	31.5	-8.1	-10.2	1.6	0.9	19.6	20.6	2.2	26.3	26.5	27.0	27.2	27.6	28.1	
7000.00	21.9	32.0	-7.8	-10.2	1.6	0.9	19.5	20.5	2.3	26.0	26.7	26.8	27.0	27.3	27.9	
7100.00	21.8	32.1	-8.0	-10.7	1.7	0.9	19.5	20.5	2.3	27.1	26.6	27.0	27.2	27.6	28.3	
7200.00	21.7	32.6	-7.8	-10.8	1.7	0.9	19.5	20.5	2.4	26.8	26.7	26.7	27.1	27.5	28.2	
7300.00	21.6	32.9	-8.0	-11.5	1.8	1.0	19.4	20.3	2.4	25.8	26.3	26.4	26.8	27.1	27.6	
7400.00	21.4	33.5	-7.7	-11.7	1.9	1.0	19.3	20.3	2.5	26.8	25.9	26.6	26.8	27.2	27.9	
7500.00	21.2	33.8	-7.9	-12.6	2.1	1.0	19.2	20.1	2.6	26.1	26.2	26.5	26.9	27.3	28.0	
7600.00	21.0	34.6	-7.5	-12.9	2.3	1.0	19.0	19.8	2.6	26.5	26.3	26.5	27.0	27.4	28.0	
7700.00	20.6	35.1	-7.6	-14.1	2.5	1.1	18.8	19.6	2.7	25.1	25.4	25.7	26.0	26.4	26.6	
7800.00	20.2	36.2	-7.0	-14.3	2.8	1.1	18.6	19.5	2.8	26.1	26.0	26.5	26.7	27.1	27.5	
7900.00	19.7	36.7	-6.9	-15.6	3.1	1.1	18.4	19.2	3.0	25.8	25.9	26.4	26.7	27.1	27.5	
8000.00	19.1	38.3	-6.1	-15.1	3.8	1.2	18.2	18.9	3.1	25.3	25.3	25.7	26.1	26.7	27.0	
8100.00	18.4	38.4	-5.9	-15.6	4.0	1.2	17.8	18.5	3.2	25.2	25.2	25.9	26.2	26.7	27.0	
8200.00	17.5	40.5	-5.1	-14.0	5.2	1.3	17.4	18.1	3.4	24.8	25.4	25.9	26.3	26.4	25.3	
8300.00	16.7	40.6	-4.8	-13.3	5.4	1.3	17.0	17.7	3.6	25.2	25.2	25.7	26.2	26.6	26.7	
8400.00	15.4	42.7	-4.1	-11.4	7.1	1.3	16.5	17.1	3.8	25.7	25.5	26.3	26.8	27.1	27.0	
8500.00	14.5	43.0	-3.8	-10.4	7.6	1.3	15.9	16.5	4.0	24.4	24.7	25.3	25.7	25.9	24.7	

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
5500.0	37.5	37.4	37.3	37.2	37.1	37.0	36.9
6000.0	35.3	35.2	35.0	34.9	34.7	34.6	34.5
7000.0	45.0	44.9	44.7	44.6	44.4	44.4	44.4
8000.0	53.0	52.9	52.7	52.5	52.4	52.3	52.5
8500.0	60.6	60.4	60.3	60.1	60.0	60.1	60.5



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Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +6.25$ V, $V_{EN} = 0$ V, $I_{DD} = 4$ mA, $I_{EN} = 0$ mA @ Temperature = $+105^\circ\text{C}$

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)
					K	Measure	
200.00	-3.8	-3.9	-4.0	-9.2	1.1	0.9	4.0
300.00	-2.4	-2.5	-6.7	-12.0	1.0	0.7	2.8
400.00	-1.8	-1.9	-9.3	-14.1	1.0	0.6	2.0
500.00	-1.5	-1.5	-12.0	-15.7	1.0	0.5	1.6
600.00	-1.3	-1.4	-14.9	-16.9	1.0	0.5	1.5
700.00	-1.3	-1.3	-18.1	-17.7	1.0	0.5	1.6
800.00	-1.2	-1.3	-22.1	-17.8	1.0	0.4	1.8
900.00	-1.2	-1.3	-26.9	-17.6	1.0	0.4	1.5
1000.00	-1.2	-1.3	-30.2	-17.2	1.0	0.4	1.3
1100.00	-1.2	-1.3	-26.4	-16.9	1.0	0.4	1.7
1200.00	-1.2	-1.3	-22.9	-16.7	1.0	0.4	1.6
1300.00	-1.2	-1.3	-20.5	-16.3	1.0	0.4	1.3
1400.00	-1.2	-1.4	-18.7	-15.8	1.0	0.4	1.6
1500.00	-1.3	-1.4	-17.4	-15.5	1.0	0.5	1.6
1600.00	-1.3	-1.5	-16.2	-15.4	1.0	0.5	1.7
1700.00	-1.3	-1.5	-15.4	-15.3	1.0	0.5	1.8
1800.00	-1.4	-1.5	-14.7	-15.2	1.0	0.5	1.9
1900.00	-1.4	-1.6	-14.2	-15.1	1.0	0.5	2.1
2000.00	-1.4	-1.6	-13.7	-15.0	1.0	0.5	1.9
2100.00	-1.5	-1.7	-13.5	-15.1	1.0	0.5	1.7
2200.00	-1.5	-1.7	-13.2	-15.4	1.0	0.5	2.1
2300.00	-1.5	-1.8	-13.1	-15.6	1.0	0.6	2.0
2400.00	-1.6	-1.8	-13.0	-15.8	1.0	0.6	2.1
2500.00	-1.6	-1.9	-12.9	-16.2	1.1	0.6	2.1
2600.00	-1.6	-1.9	-13.0	-16.8	1.1	0.6	2.1
2700.00	-1.6	-2.0	-13.1	-17.5	1.1	0.6	2.3
2800.00	-1.6	-2.0	-13.2	-18.2	1.1	0.6	2.1
2900.00	-1.7	-2.1	-13.4	-19.0	1.1	0.6	2.4
3000.00	-1.7	-2.1	-13.5	-20.1	1.1	0.7	2.1
3100.00	-1.7	-2.1	-13.6	-21.4	1.1	0.7	2.5
3200.00	-1.7	-2.1	-13.7	-23.1	1.1	0.7	2.5
3300.00	-1.7	-2.1	-13.8	-24.6	1.1	0.7	2.5
3400.00	-1.7	-2.1	-13.8	-26.1	1.1	0.7	2.6
3500.00	-1.7	-2.1	-13.8	-27.0	1.1	0.7	2.4
3600.00	-1.7	-2.1	-13.8	-25.5	1.1	0.7	2.5
3700.00	-1.8	-2.1	-13.7	-23.5	1.1	0.7	2.5
3800.00	-1.8	-2.1	-13.5	-21.6	1.1	0.7	2.3
3900.00	-1.8	-2.1	-13.2	-20.0	1.1	0.7	2.6
4000.00	-1.8	-2.2	-13.0	-18.5	1.1	0.7	2.3
4100.00	-1.8	-2.2	-12.7	-17.1	1.1	0.7	2.2
4200.00	-1.8	-2.2	-12.4	-16.1	1.1	0.7	2.2
4300.00	-1.9	-2.2	-12.2	-15.3	1.1	0.6	2.3
4400.00	-1.9	-2.3	-11.9	-14.6	1.1	0.6	2.1
4500.00	-1.9	-2.3	-11.7	-14.0	1.1	0.6	2.4
4600.00	-1.9	-2.3	-11.5	-13.4	1.1	0.6	2.4
4700.00	-1.9	-2.3	-11.3	-13.0	1.1	0.6	2.3
4800.00	-2.0	-2.4	-11.2	-12.7	1.1	0.6	2.4
4900.00	-2.0	-2.4	-11.2	-12.4	1.1	0.6	2.4
5000.00	-2.0	-2.4	-11.0	-12.1	1.1	0.6	2.2
5100.00	-2.0	-2.4	-11.0	-11.9	1.1	0.6	2.5
5200.00	-2.0	-2.5	-10.9	-11.8	1.1	0.6	2.3
5300.00	-1.9	-2.5	-11.0	-11.7	1.1	0.6	2.4
5400.00	-2.0	-2.5	-11.1	-11.6	1.1	0.6	1.9
5500.00	-1.9	-2.5	-11.1	-11.5	1.1	0.6	1.8
5600.00	-1.9	-2.5	-11.3	-11.6	1.1	0.6	2.4
5700.00	-1.9	-2.5	-11.4	-11.6	1.1	0.6	2.4
5800.00	-1.9	-2.5	-11.5	-11.6	1.1	0.6	1.8
5900.00	-1.9	-2.5	-11.9	-11.8	1.1	0.6	1.1
6000.00	-1.8	-2.5	-12.0	-11.8	1.1	0.6	1.7
6100.00	-1.8	-2.4	-12.4	-12.0	1.1	0.6	2.4
6200.00	-1.8	-2.4	-12.8	-12.3	1.1	0.6	2.6
6300.00	-1.7	-2.4	-13.0	-12.3	1.1	0.6	1.8
6400.00	-1.7	-2.4	-13.4	-12.6	1.1	0.6	2.2
6500.00	-1.7	-2.4	-13.7	-12.7	1.1	0.6	2.2
6600.00	-1.7	-2.4	-14.0	-12.8	1.1	0.6	1.8
6700.00	-1.6	-2.4	-14.5	-13.2	1.1	0.6	3.1
6800.00	-1.7	-2.4	-14.8	-13.3	1.1	0.6	1.9
6900.00	-1.7	-2.4	-14.8	-13.3	1.1	0.6	2.9
7000.00	-1.7	-2.4	-15.1	-13.5	1.1	0.6	2.3
7100.00	-1.7	-2.5	-15.0	-13.5	1.1	0.6	2.4
7200.00	-1.7	-2.5	-14.8	-13.5	1.1	0.6	2.5
7300.00	-1.8	-2.5	-14.7	-13.4	1.1	0.6	2.6
7400.00	-1.9	-2.6	-14.1	-13.0	1.1	0.6	3.1
7500.00	-1.9	-2.6	-13.6	-12.8	1.1	0.6	3.0
7600.00	-2.0	-2.8	-13.1	-12.4	1.2	0.7	2.8
7700.00	-2.1	-2.8	-12.3	-11.8	1.2	0.7	3.2
7800.00	-2.2	-2.9	-11.8	-11.4	1.2	0.7	2.3
7900.00	-2.4	-3.1	-11.1	-10.7	1.2	0.7	3.0
8000.00	-2.5	-3.2	-10.2	-10.0	1.2	0.7	2.7

TEST CONDITIONS: $V_{DD} = +6.25$ V, $V_{EN} = 0$ V, $I_{DD} = 4$ mA, $I_{EN} = 0$ mA @ Temperature = $+105^\circ\text{C}$

FREQ (MHz)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
400.0	27.2	26.2	24.3	21.2	16.2	14.1	12.8
1000.0	29.3	28.3	26.5	23.2	17.1	13.9	14.3
2000.0	30.8	30.1	28.9	26.7	22.6	16.6	16.0
4000.0	31.1	30.7	29.9	28.8	26.5	21.8	18.0
6000.0	32.4	31.9	30.9	29.2	26.0	19.6	16.2
8000.0	32.7	32.3	31.3	29.7	26.3	19.1	16.1

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)
400.0	70.0	68.8	66.8	62.4	51.7	44.9	43.9
1000.0	71.5	71.2	69.9	65.5	53.2	59.9	49.6
2000.0	70.1	69.6	68.9	67.3	62.4	54.9	46.3
4000.0	74.1	74.1	74.2	74.6	75.4	72.3	49.8
6000.0	72.9	72.7	72.3	71.7	69.7	61.8	54.7
8000.0	83.2	82.9	82.8	82.1	80.5	73.7	64.5

FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
400.0	11.0	8.1
1000.0	10.8	8.7
2000.0	12.5	10.1
4000.0	14.3	11.8
6000.0	14.7	11.8
8000.0	14.7	11.3



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Definitions:

Input Return Loss = S11 (dB)

Gain = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +6.25 V, V_{EN} = 0 V, I_{DD} = 4 mA, I_{EN} = 0 mA @ Temperature = +105°C

FREQ (GHz)	Insertion Loss (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		Noise Figure (dB)	FREQ (MHz)	1dB Comp. Input (dBm)	1dB Comp. Output (dBm)
					K	Measure				
5500.00	-1.8	-2.4	-20.0	-17.3	1.1	0.7	3.0	5500.0	13.5	10.5
5600.00	-1.7	-2.4	-20.5	-17.1	1.1	0.7	3.1	6000.0	13.8	11.0
5700.00	-1.7	-2.5	-20.4	-16.9	1.1	0.7	3.1	7000.0	15.4	11.9
5800.00	-1.7	-2.5	-19.8	-16.2	1.1	0.7	2.9	8000.0	16.2	11.0
5900.00	-1.7	-2.5	-18.9	-15.8	1.1	0.7	2.7	8500.0	15.2	9.7
6000.00	-1.7	-2.5	-18.2	-15.1	1.1	0.7	3.0			
6100.00	-1.7	-2.5	-17.1	-14.4	1.1	0.7	3.0			
6200.00	-1.7	-2.6	-16.2	-13.8	1.1	0.7	2.9			
6300.00	-1.8	-2.6	-15.2	-13.2	1.1	0.7	2.9			
6400.00	-1.8	-2.7	-14.5	-12.7	1.1	0.7	2.8			
6500.00	-1.8	-2.7	-13.7	-12.1	1.1	0.7	3.2			
6600.00	-1.9	-2.8	-13.0	-11.6	1.1	0.7	3.1			
6700.00	-1.9	-2.8	-12.3	-11.1	1.1	0.7	3.1			
6800.00	-2.0	-2.9	-11.7	-10.6	1.1	0.7	3.0			
6900.00	-2.0	-3.0	-11.0	-10.1	1.1	0.7	3.1			
7000.00	-2.1	-3.1	-10.5	-9.7	1.1	0.7	3.4			
7100.00	-2.2	-3.1	-9.9	-9.3	1.1	0.7	3.1			
7200.00	-2.3	-3.2	-9.4	-8.9	1.1	0.7	3.6			
7300.00	-2.4	-3.4	-8.8	-8.4	1.1	0.7	3.4			
7400.00	-2.6	-3.5	-8.4	-8.1	1.2	0.7	3.4			
7500.00	-2.7	-3.6	-7.9	-7.6	1.2	0.6	3.7			
7600.00	-2.9	-3.8	-7.4	-7.3	1.2	0.6	3.4			
7700.00	-3.1	-3.9	-7.0	-6.8	1.2	0.6	3.5			
7800.00	-3.2	-4.1	-6.6	-6.6	1.2	0.6	3.1			
7900.00	-3.4	-4.3	-6.2	-6.2	1.2	0.6	4.0			
8000.00	-3.6	-4.5	-5.8	-5.9	1.2	0.6	4.0			
8100.00	-3.9	-4.7	-5.4	-5.5	1.2	0.6	3.9			
8200.00	-4.1	-4.9	-5.1	-5.3	1.2	0.6	4.0			
8300.00	-4.3	-5.1	-4.8	-4.9	1.2	0.6	4.1			
8400.00	-4.5	-5.3	-4.6	-4.8	1.2	0.6	4.4			
8500.00	-4.7	-5.5	-4.2	-4.4	1.2	0.6	4.4			

FREQ (MHz)	IP-2 Output Pout = -2 (dBm)	IP-2 Output Pout = +0 (dBm)	IP-2 Output Pout = +2 (dBm)	IP-2 Output Pout = +4 (dBm)	IP-2 Output Pout = +6 (dBm)	IP-2 Output Pout = +8 (dBm)	IP-2 Output Pout = +10 (dBm)	IP-3 Output Pout = -2 (dBm)	IP-3 Output Pout = +0 (dBm)	IP-3 Output Pout = +2 (dBm)	IP-3 Output Pout = +4 (dBm)	IP-3 Output Pout = +6 (dBm)	IP-3 Output Pout = +8 (dBm)	IP-3 Output Pout = +10 (dBm)
5500.0	72.0	71.9	71.7	70.9	68.3	62.5	55.2	33.3	32.8	31.8	31.5	29.2	25.2	18.8
6000.0	75.3	75.3	75.2	74.9	74.2	71.2	63.2	33.7	33.3	32.8	30.9	27.9	21.4	16.3
7000.0	85.9	85.7	85.4	84.7	83.1	78.4	65.7	34.4	33.7	33.3	30.3	27.7	23.4	18.5
8000.0	83.5	83.4	83.1	82.8	81.9	78.4	72.3	33.6	33.2	32.4	32.2	30.1	26.3	18.7
8500.0	94.2	94.3	94.3	94.0	91.2	99.4	100.9	32.8	32.0	30.6	28.0	22.6	15.5	15.3



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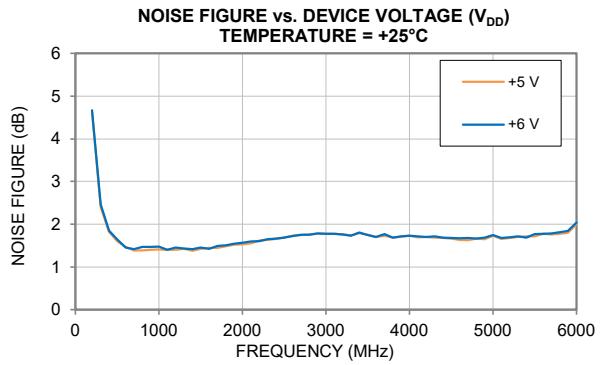
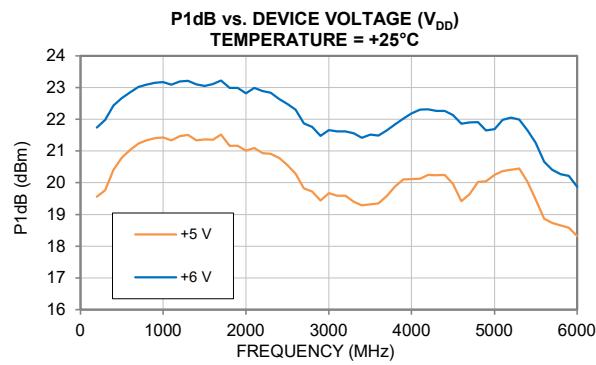
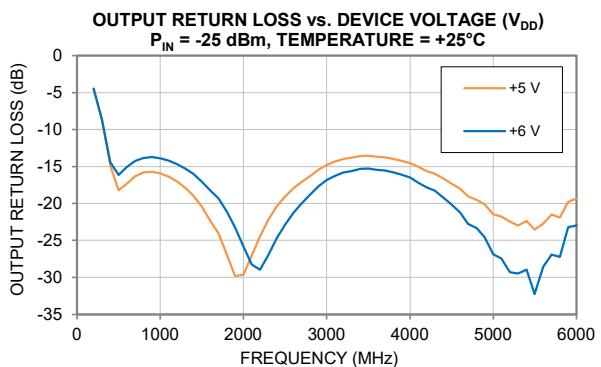
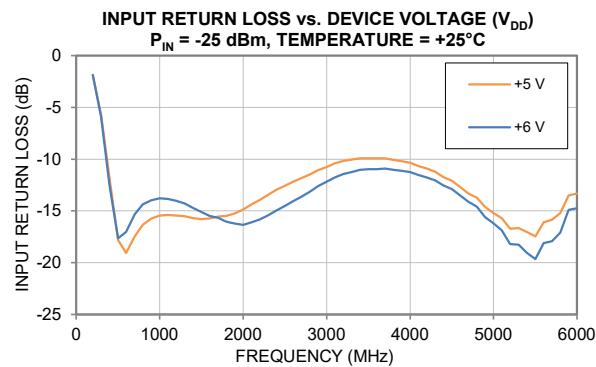
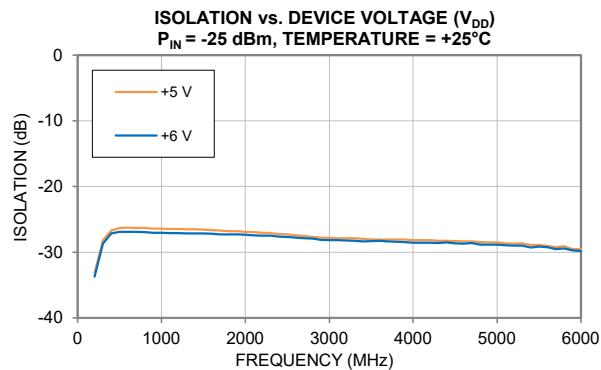
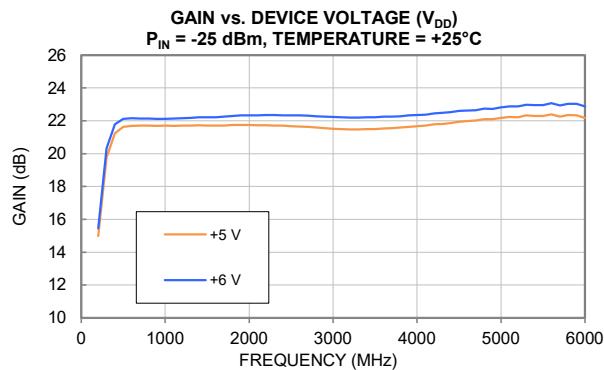
TSY-83LN+

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Typical Performance Curves

Note: The following data was taken on the Mini-Circuits Characterization Test Board TB-TSY-83LNC+ (Figure 2). All data taken at nominal conditions $V_{EN} = V_{DD}$ and $R_{IADJ} = \text{Open}$ unless noted otherwise.

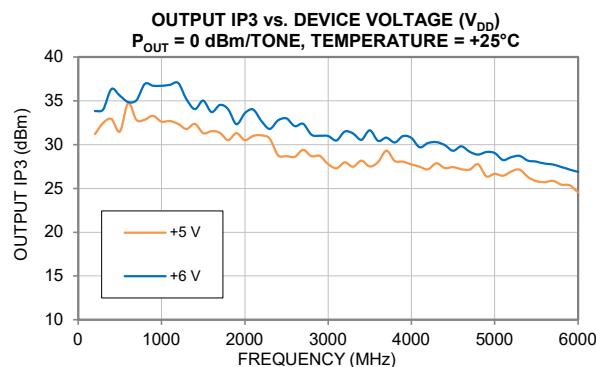
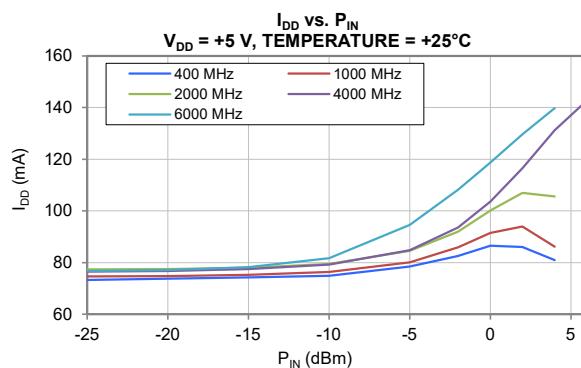
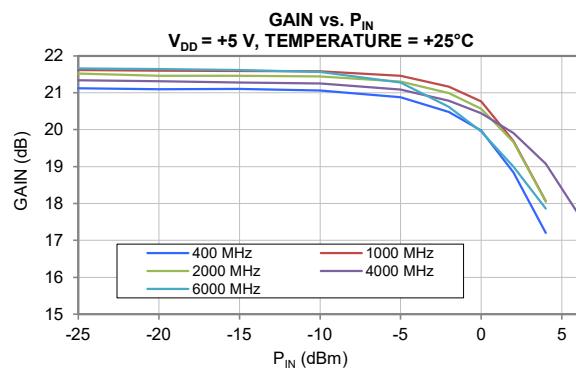
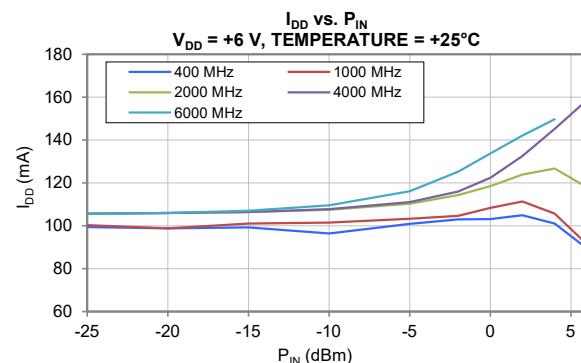
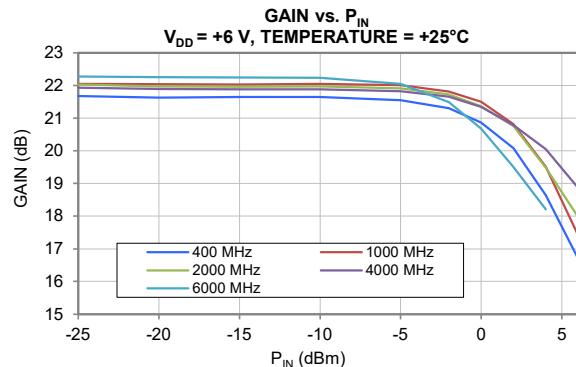


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TSY-83LN+

Typical Performance Curves

Note: The following data was taken on the Mini-Circuits Characterization Test Board TB-TSY-83LNC+ (Figure 2). All data taken at nominal conditions $V_{EN} = V_{DD}$ and $R_{IADJ} = \text{Open}$ unless noted otherwise.

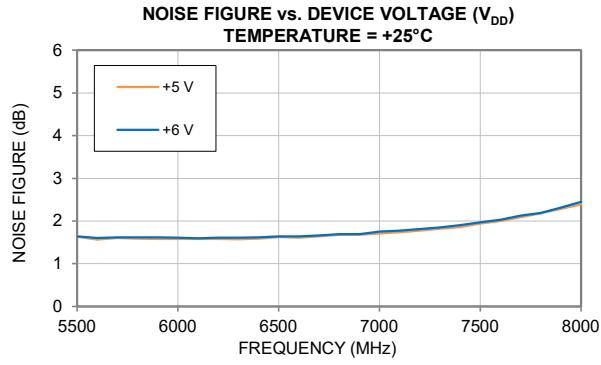
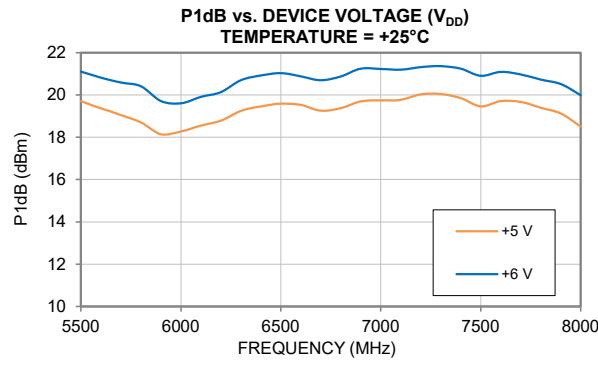
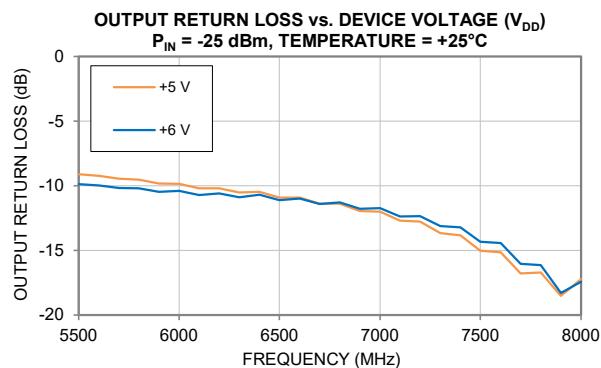
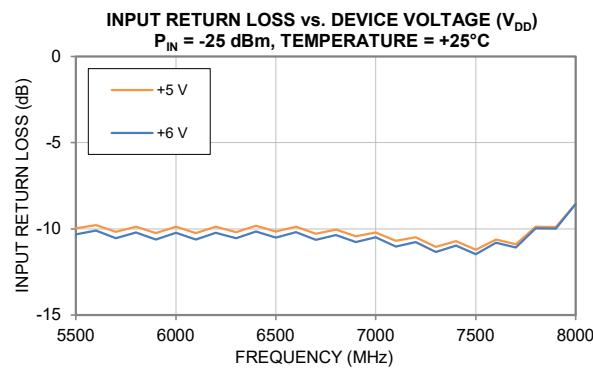
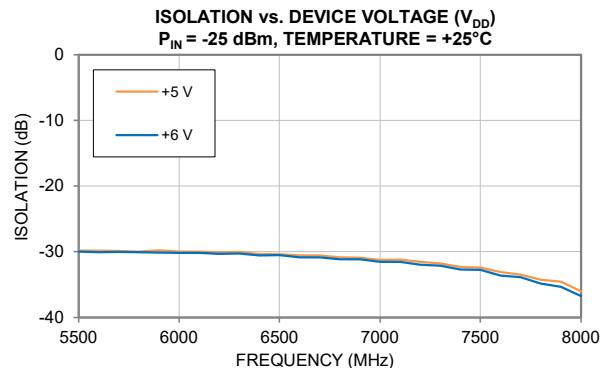
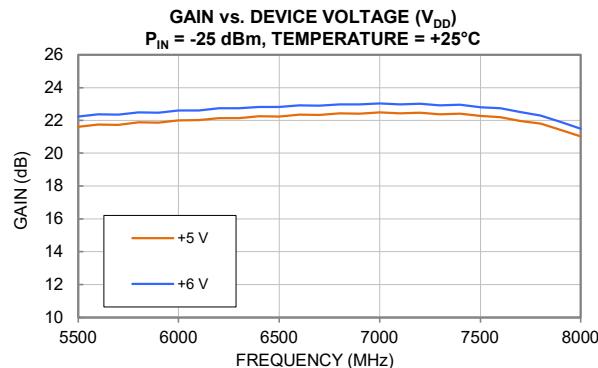


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TSY-83LN+

Typical Performance Curves

Note: The following data was taken on the Mini-Circuits Characterization Test Board TB-TSY-832LNC+ (Figure 3). All data taken at nominal conditions $V_{EN} = V_{DD}$ and $R_{IADJ} = \text{Open}$ unless noted otherwise.

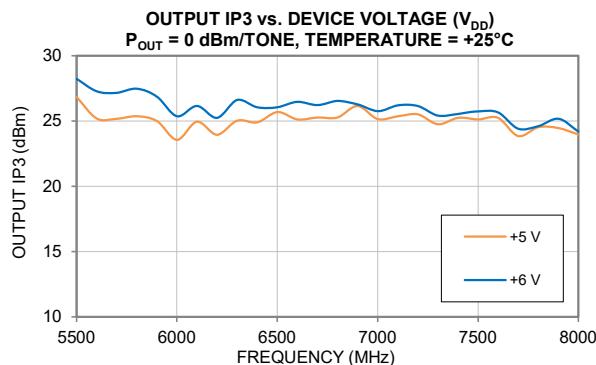
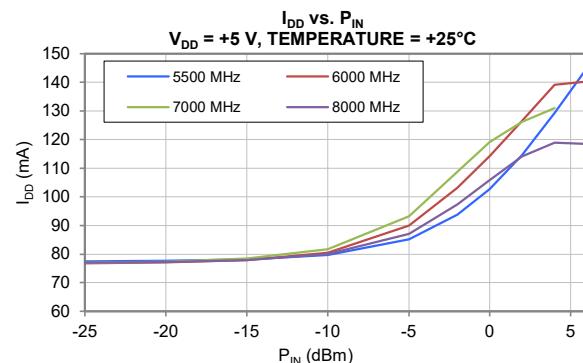
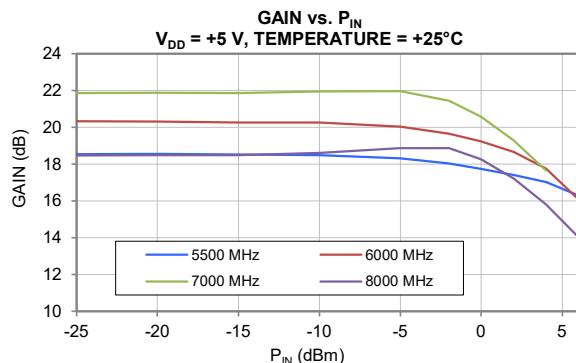
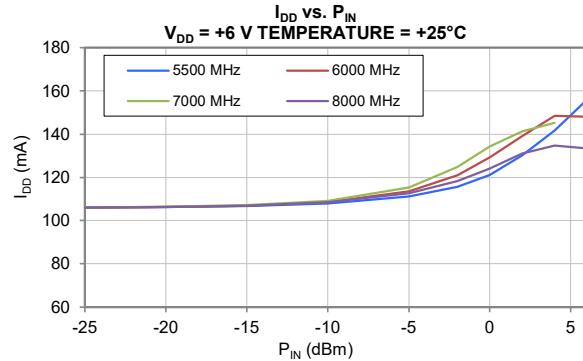
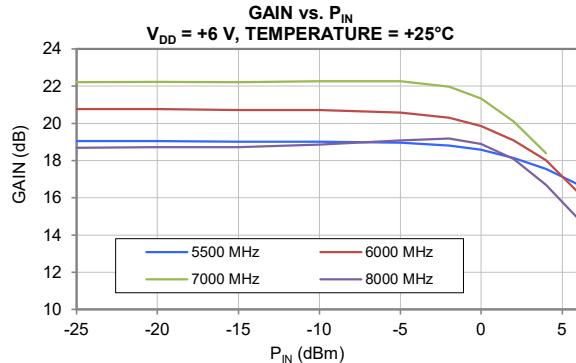


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Typical Performance Curves

Note: The following data was taken on the Mini-Circuits Characterization Test Board TB-TSY-832LNC+ (Figure 3). All data taken at nominal conditions $V_{EN} = V_{DD}$ and $R_{IADJ} = \text{Open}$ unless noted otherwise.

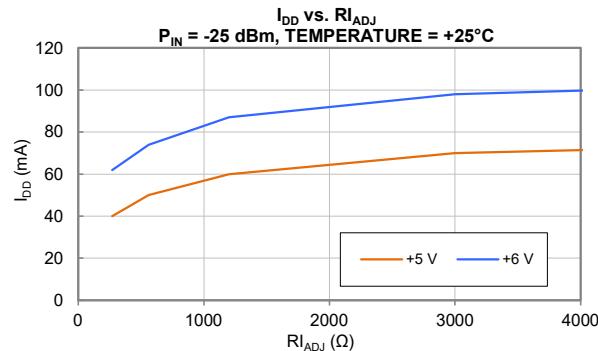
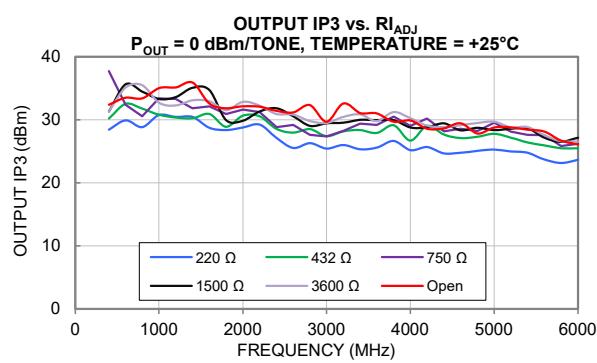
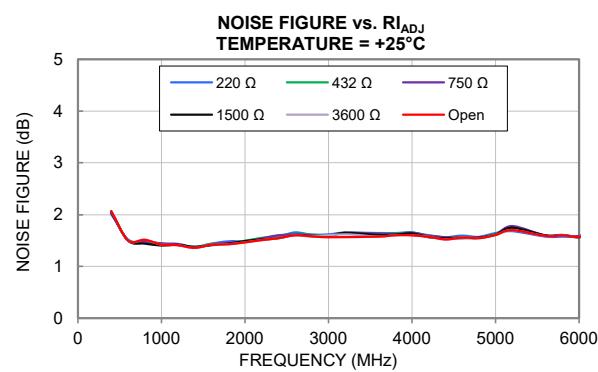
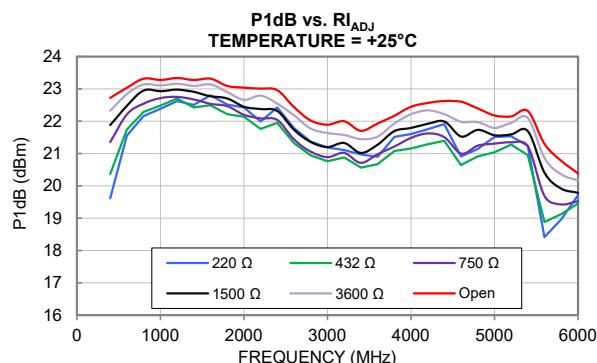
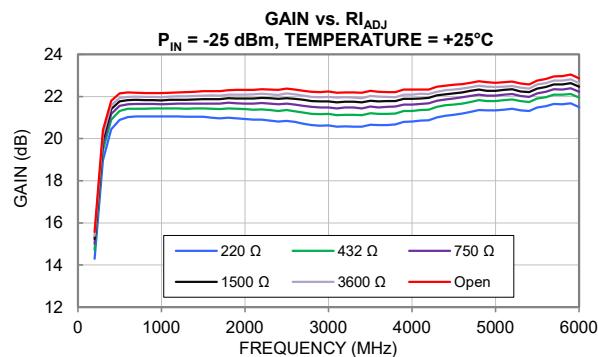


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Typical Performance Curves

Note: The following data was taken on the Mini-Circuits Characterization Test Board TB-TSY-83LNC+ (Figure 2). All data taken at nominal conditions $V_{EN} = V_{DD} = +6$ V unless noted otherwise.

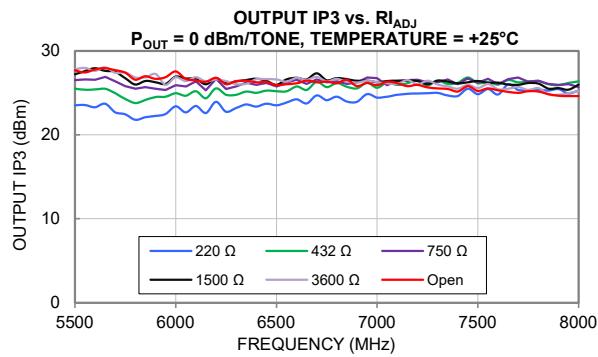
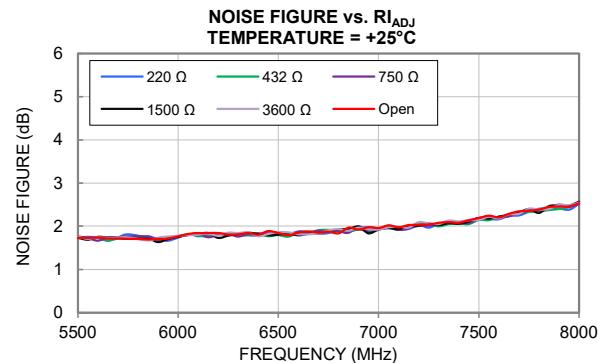
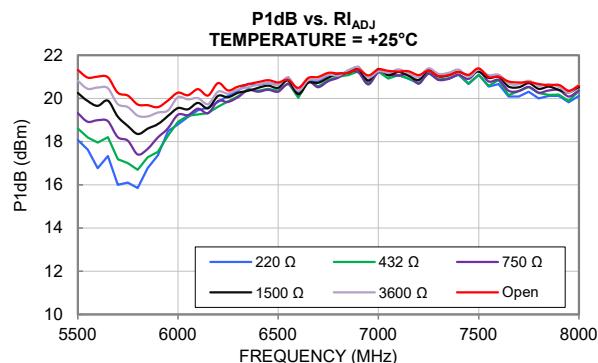
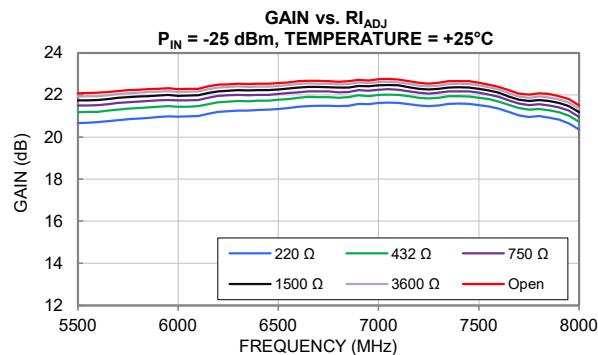


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Typical Performance Curves

Note: The following data was taken on the Mini-Circuits Characterization Test Board TB-TSY-832LNC+ (Figure 3). All data taken at nominal conditions $V_{EN} = V_{DD} = +6$ V unless noted otherwise.

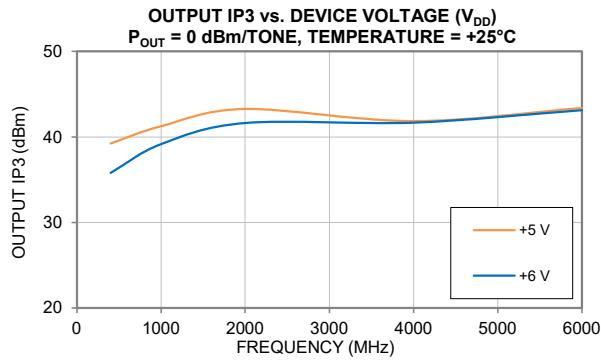
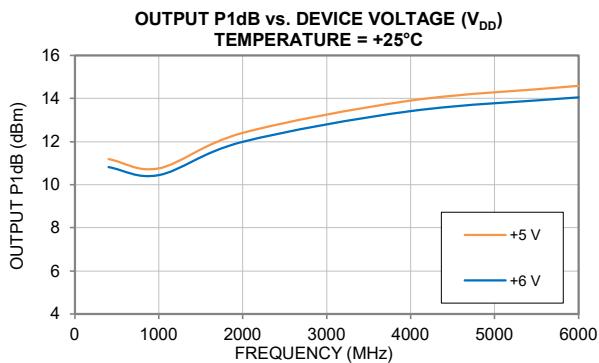
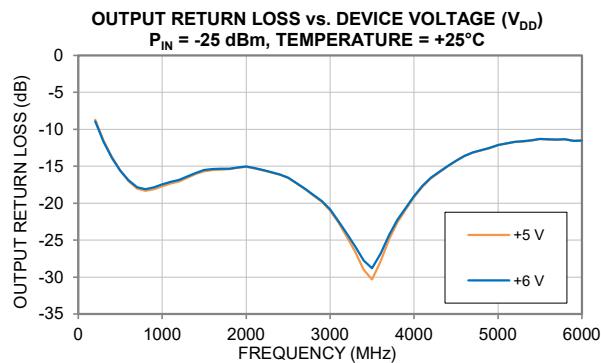
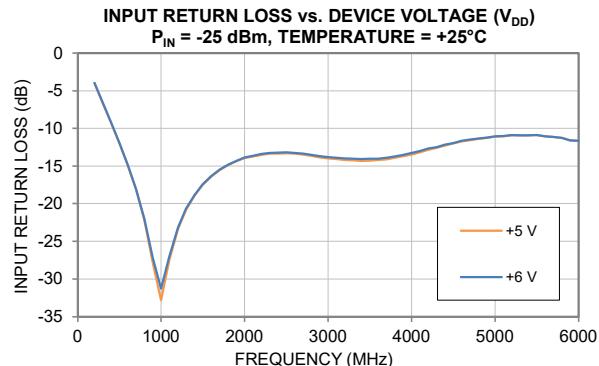
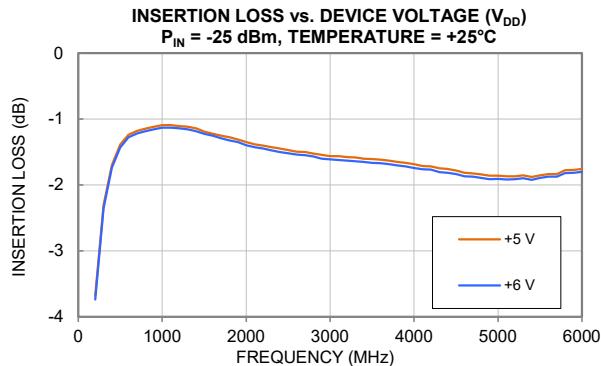


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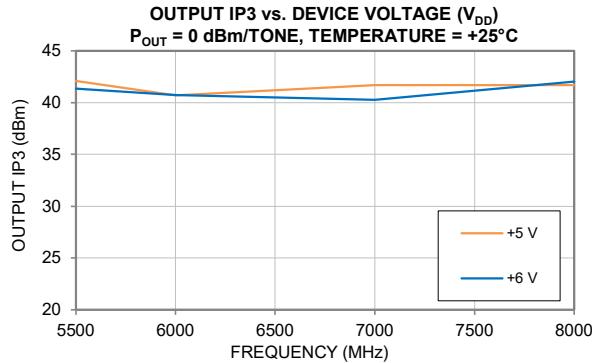
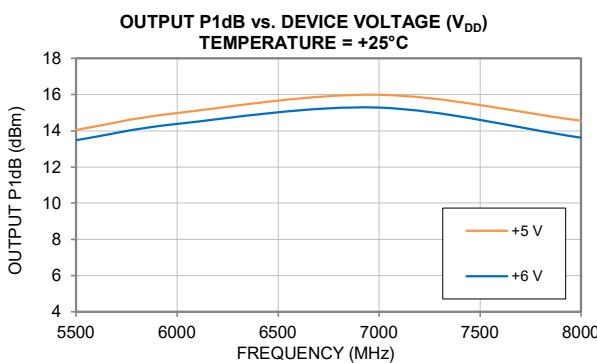
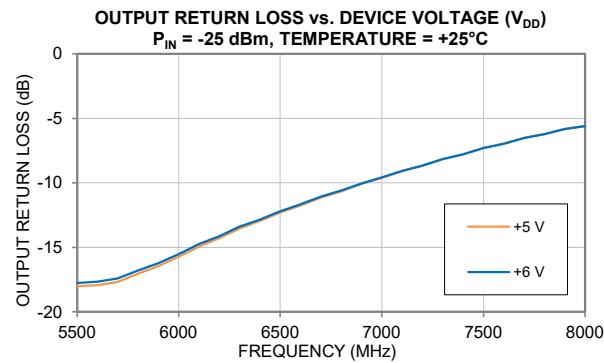
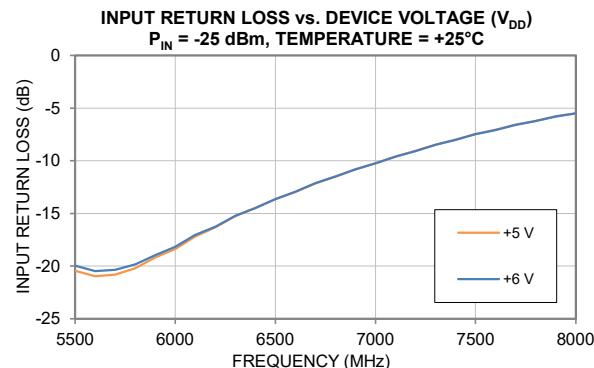
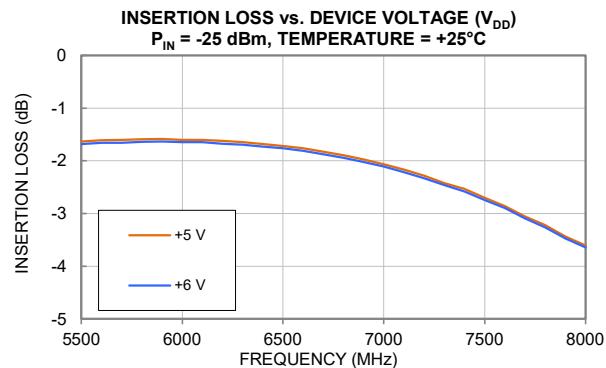
Typical Performance Curves

Note: The following data was taken on the Mini-Circuits Characterization Test Board TB-TSY-83LNC+ (Figure 2). All data taken at nominal conditions $V_{EN} = 0$ V and $R_{ADJ} = \text{Open}$ unless noted otherwise.



Typical Performance Curves

Note: The following data was taken on the Mini-Circuits Characterization Test Board TB-TSY-832LNC+ (Figure 3). All data taken at nominal conditions $V_{EN} = 0$ V and R_{IADJ} = Open unless noted otherwise.

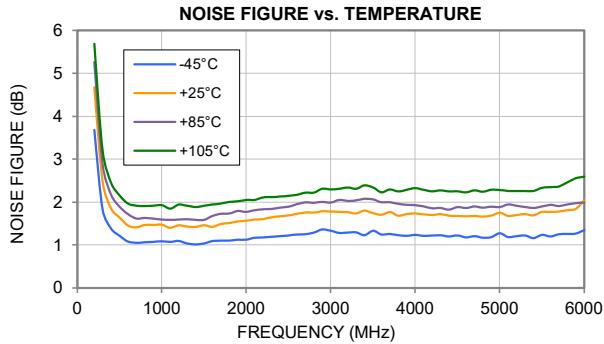
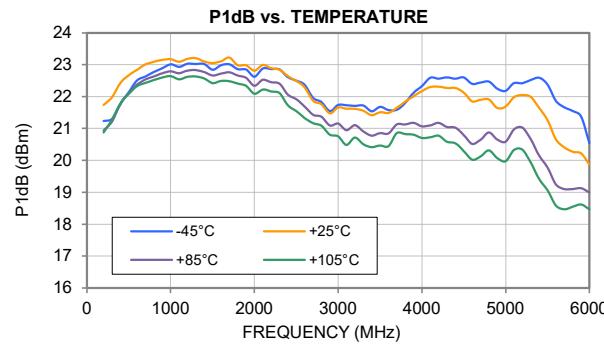
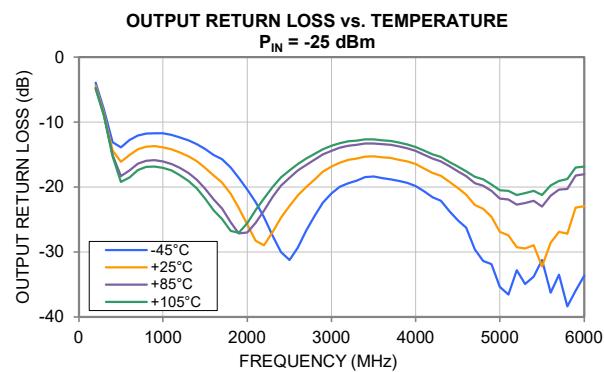
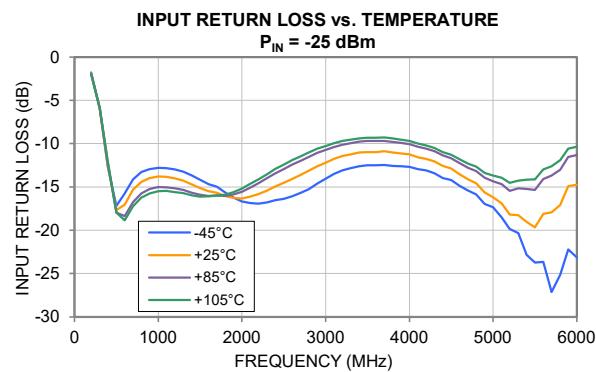
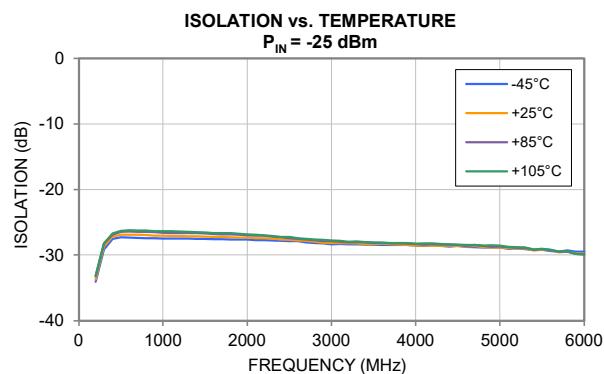
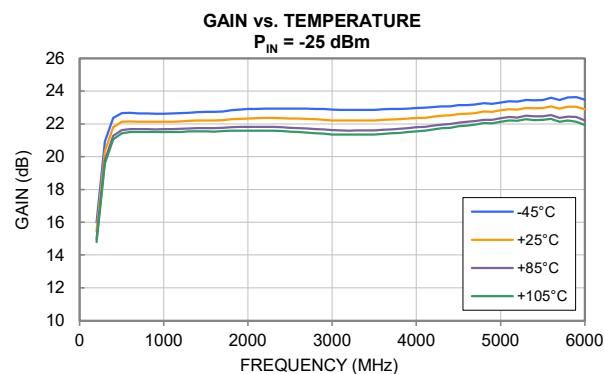


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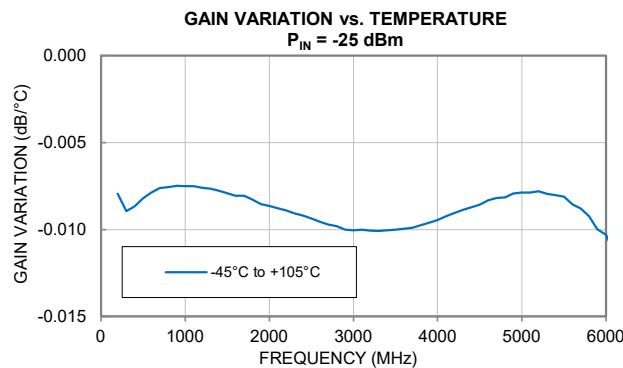
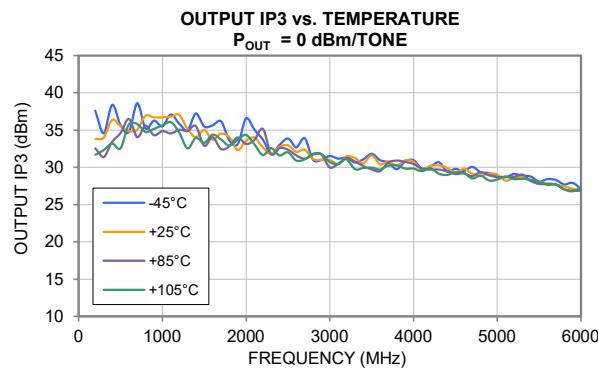
Typical Performance Curves

Note: The following data was taken on the Mini-Circuits Characterization Test Board TB-TSY-83LNC+ (Figure 2). All data taken at nominal conditions $V_{EN} = V_{DD} = +6$ V, and R_{IADJ} = Open unless noted otherwise.



Typical Performance Curves

Note: The following data was taken on the Mini-Circuits Characterization Test Board TB-TSY-83LNC+ (Figure 2). All data taken at nominal conditions $V_{EN} = V_{DD} = +6$ V, and R_{LADJ} = Open unless noted otherwise.

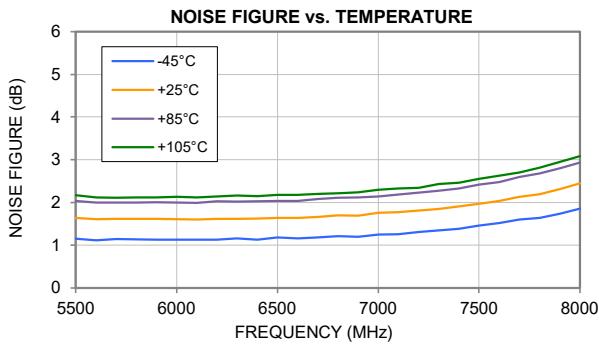
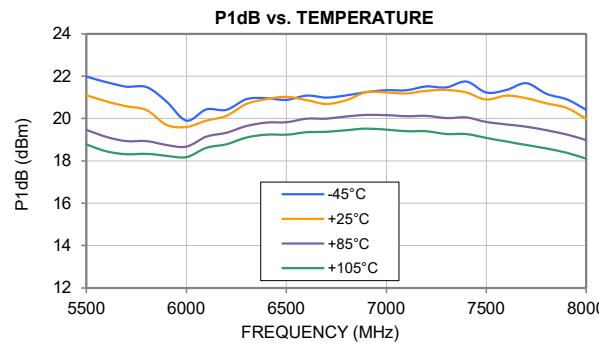
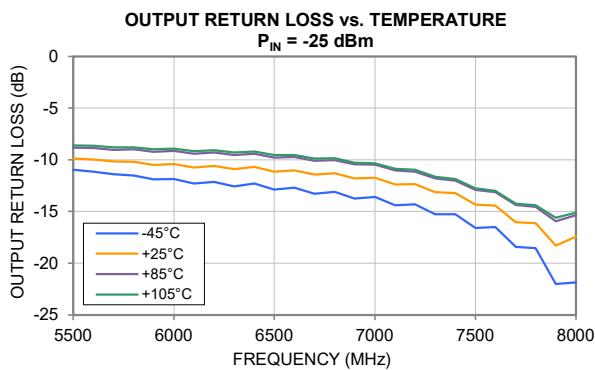
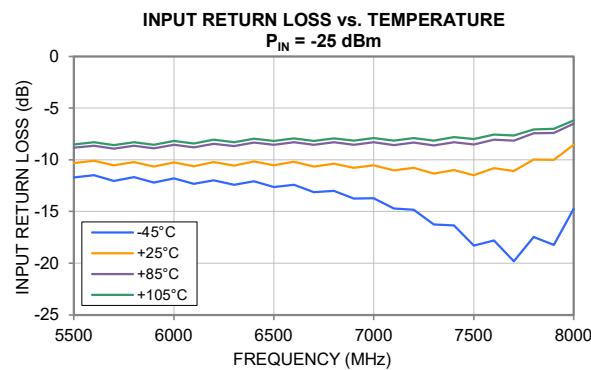
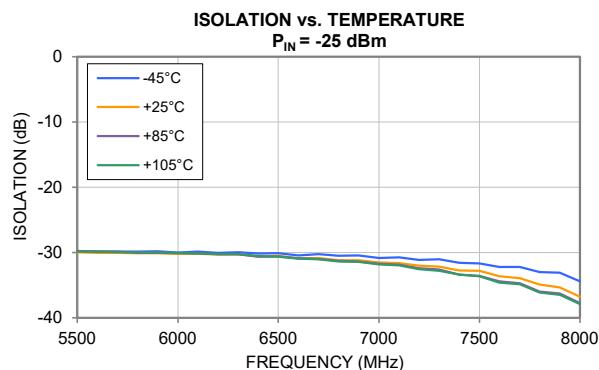
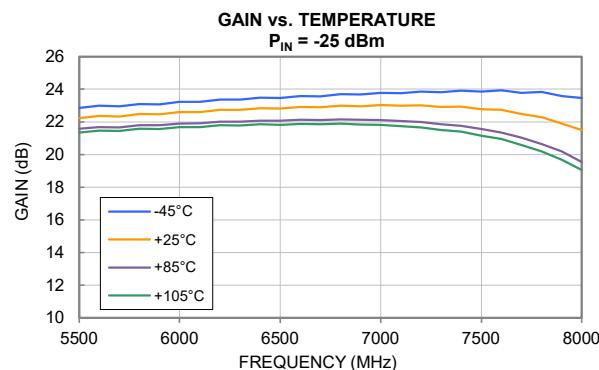


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Typical Performance Curves

Note: The following data was taken on the Mini-Circuits Characterization Test Board TB-TSY-832LNC+ (Figure 3). All data taken at nominal conditions $V_{EN} = V_{DD} = +6$ V and R_{IADJ} = Open unless noted otherwise.



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The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: www.minicircuits.com

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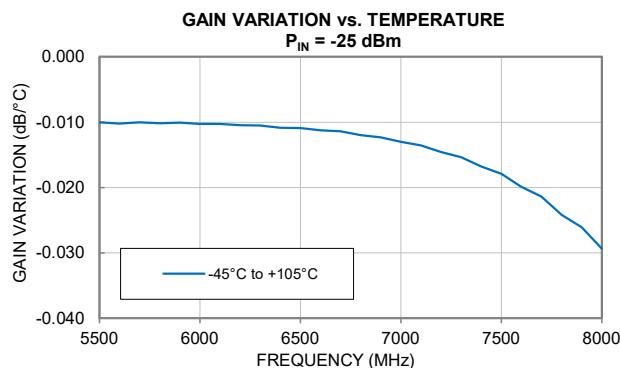
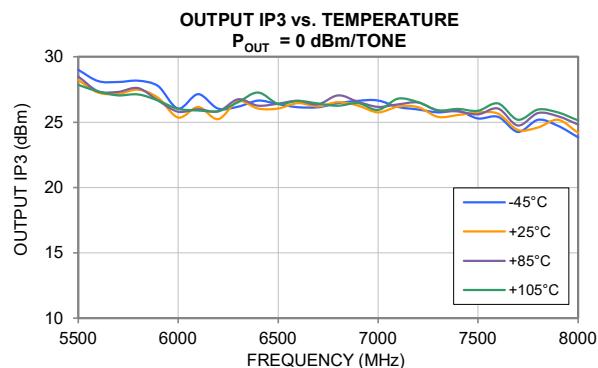


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Typical Performance Curves

Note: The following data was taken on the Mini-Circuits Characterization Test Board TB-TSY-832LNC+ (Figure 3). All data taken at nominal conditions $V_{EN} = V_{DD} = +6$ V and $R_{LADJ} = \text{Open}$ unless noted otherwise.

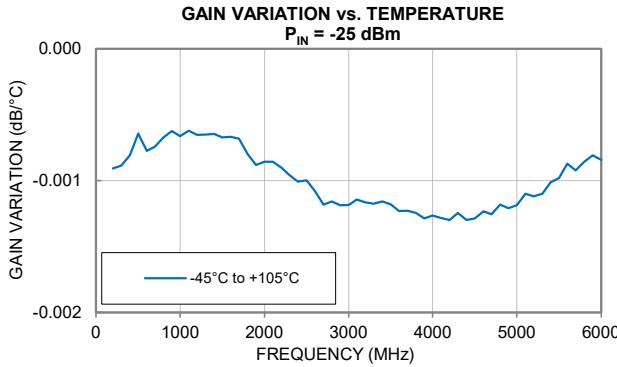
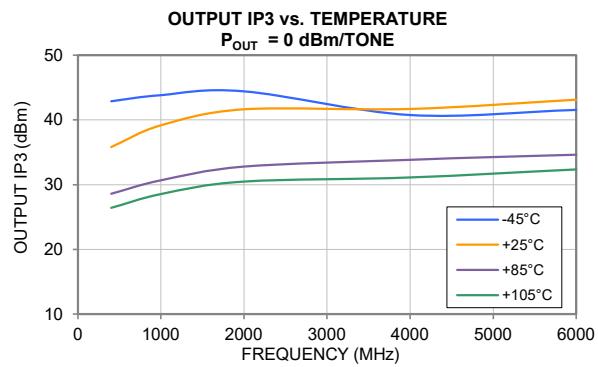
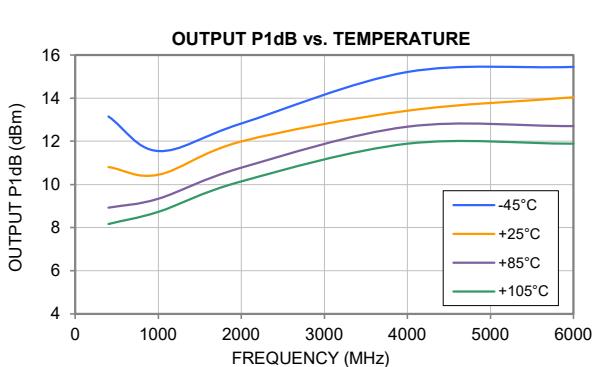
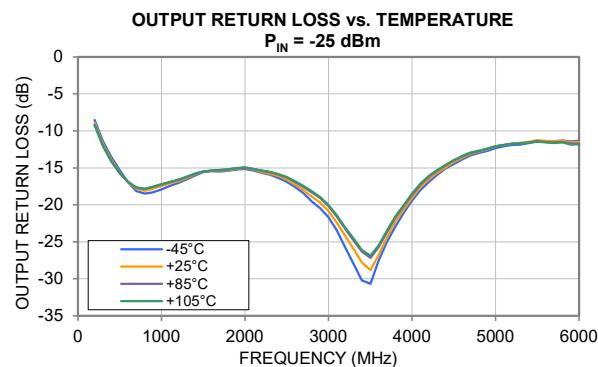
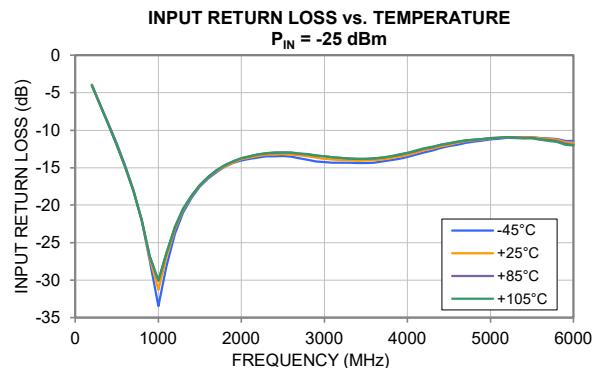
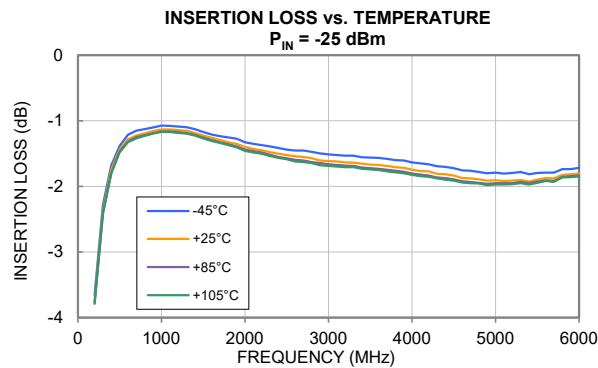


MMIC Amplifier

TSY-83LN+

Typical Performance Curves

Note: The following data was taken on the Mini-Circuits Characterization Test Board TB-TSY-83LNC+ (Figure 2). All data taken at nominal conditions $V_{EN} = 0$ V, $V_{DD} = +6$ V, and $R_{LADJ} = \text{Open}$ unless noted otherwise.

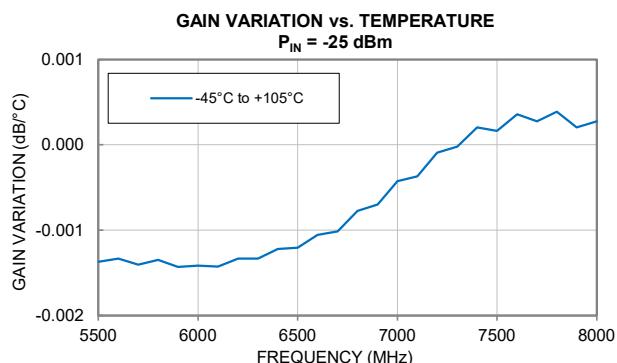
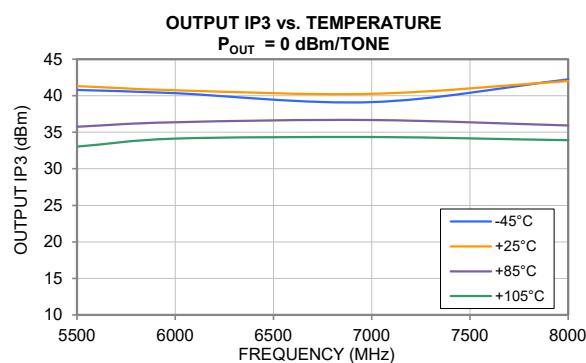
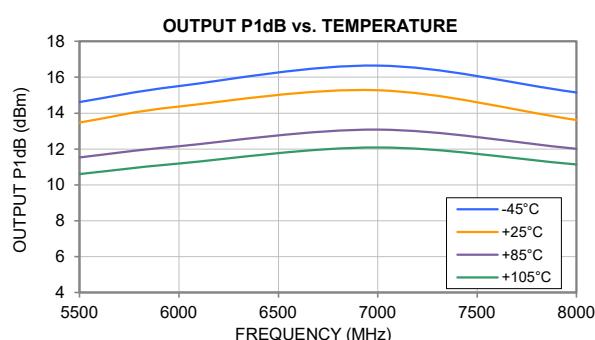
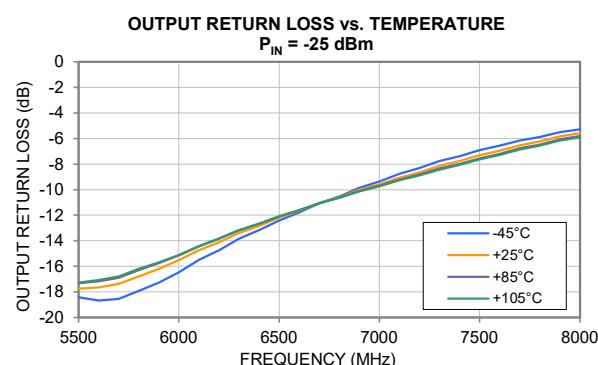
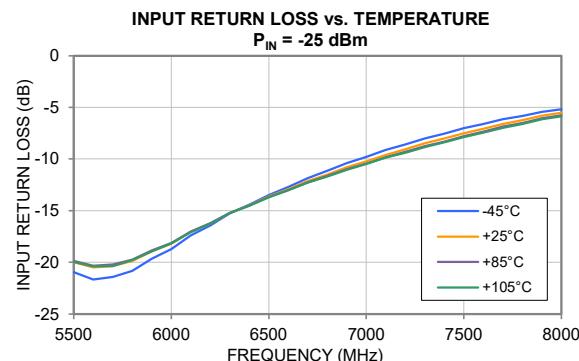
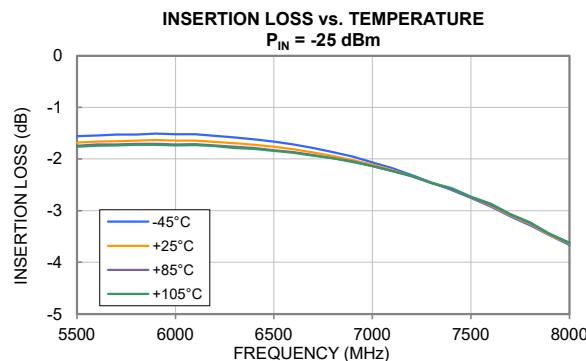


MMIC Amplifier

TSY-83LN+

Typical Performance Curves

Note: The following data was taken on the Mini-Circuits Characterization Test Board TB-TSY-832LNC+ (Figure 3). All data taken at nominal conditions $V_{EN} = 0$ V, $V_{DD} = +6$ V, and $R_{L,ADJ} = \text{Open}$ unless noted otherwise.

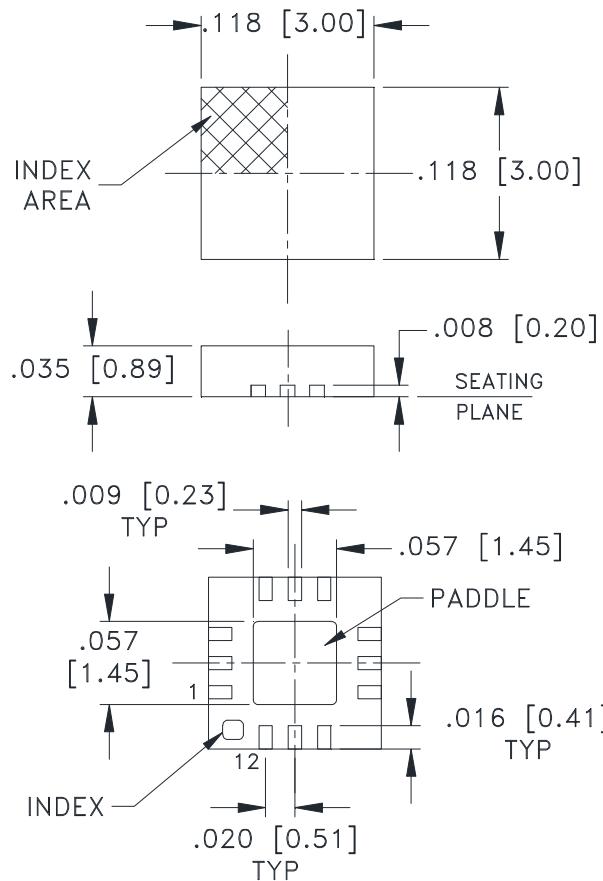


Case Style

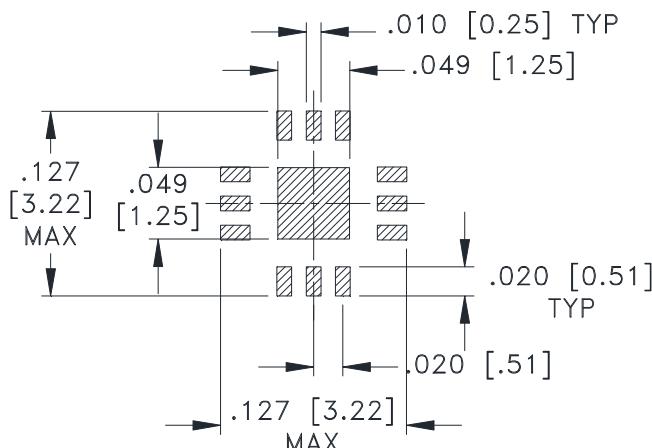
DQ

DQ1225

Outline Dimensions



PCB Land Pattern



SUGGESTED LAYOUT,
TOLERANCE TO BE WITHIN $\pm .002$

Weight: .02 Grams

Dimensions are in inches (mm). Tolerances: 2Pl. $\pm .01$; 3 Pl. $\pm .004$

Notes:

1. Case material: Plastic.
2. Termination finish:

For RoHS Case Styles: Tin-Silver alloy plate over Nickel barrier or Matte-Tin. All models, (+) suffix.
See Data sheet.

For RoHS-5 Case Styles: Tin-Lead plate. All models, no (+) suffix.



Distribution Centers NORTH AMERICA 800-654-7949 • 417-335-5935 • Fax 417-335-5945 • EUROPE 44-1252-832600 • Fax 44-1252-837010

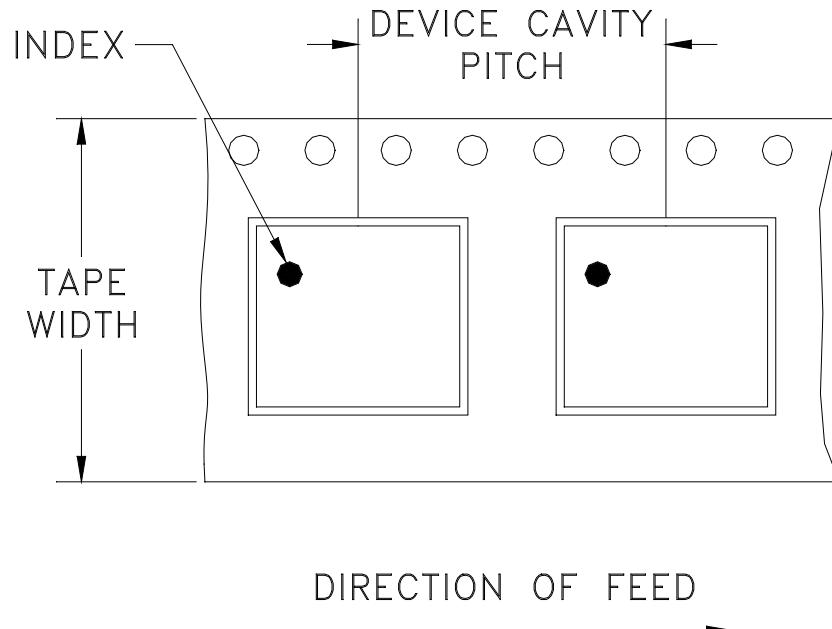
Mini-Circuits ISO 9001 & ISO 14001 Certified

INTERNET <http://www.minicircuits.com>

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661

Tape & Reel Packaging TR-F66

DEVICE ORIENTATION IN T&R



Tape Width, mm	Device Cavity Pitch, mm	Reel Size, inches	Devices per Reel see note	
8	4	7	Small quantity standard	20
				50
				100
				200
				500
		7	Standard	1000, 2000, 3000

Note: Please consult individual model data sheet to determine device per reel availability.

Mini-Circuits carrier tape materials provide protection from ESD (Electro-Static Discharge) during handling and transportation. Tapes are static dissipative and comply with industry standards EIA-481/EIA-541.

Go to: www.minicircuits.com/pages/pdfs/tape.pdf



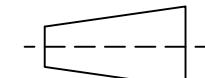
Distribution Centers NORTH AMERICA 800-654-7949 • 417-335-5935 • Fax 417-335-5945 • EUROPE 44-1252-832600 • Fax 44-1252-837010

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P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661

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THIRD ANGLE PROJECTION

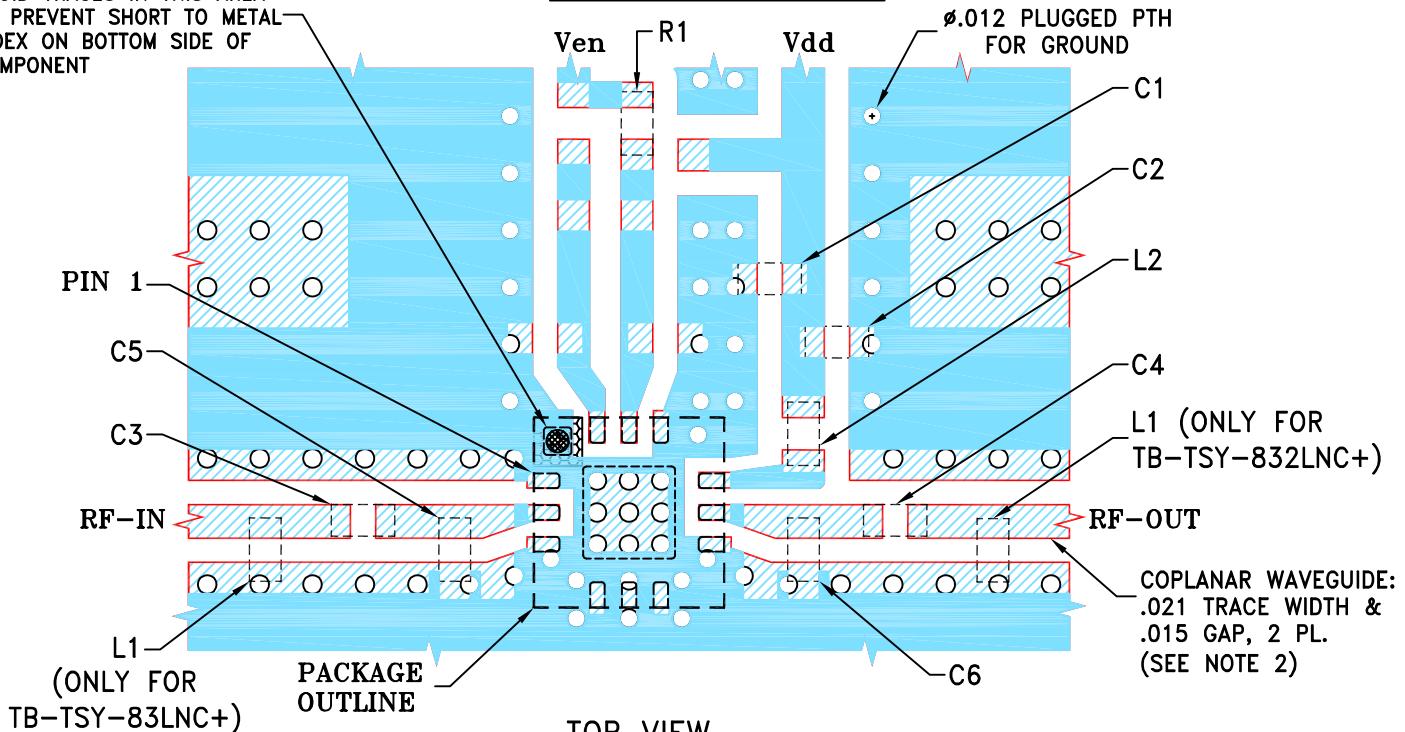


REVISIONS

REV	ECN No.	DESCRIPTION	DATE	DR	AUTH
OR	ECO-020666	NEW RELEASE	01/29/24	ITG	IL

SUGGESTED MOUNTING CONFIGURATION FOR
DQ1225 CASE STYLE

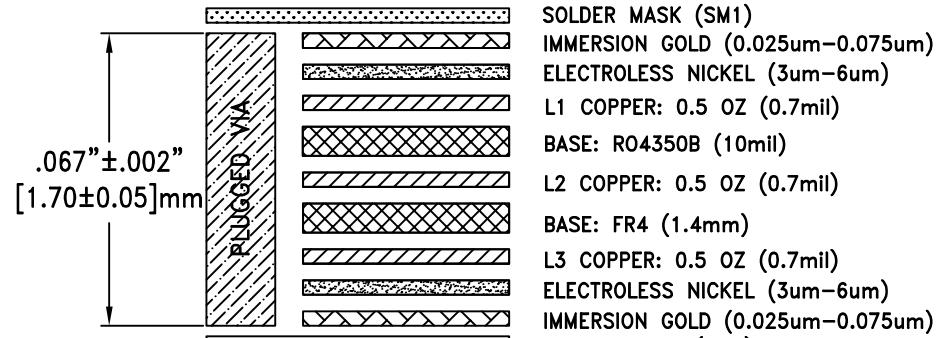
KEEP-OUT ZONE, .030X.030,
AVOID TRACES IN THIS AREA
TO PREVENT SHORT TO METAL
INDEX ON BOTTOM SIDE OF
COMPONENT



TOP VIEW

3 LAYER STACK-UP DIAGRAM

COMPONENT	SIZE
C1...C6	0402
L1,L2	0402
R1	0402



NOTES:

1. PCB IS MULTILAYER PCB, SEE STACK-UP DIAGRAM.
2. TRACE WIDTH & GAP PARAMETERS ARE SHOWN FOR ROGERS R04350B WITH DIELECTRIC THICKNESS .010" ± .001"; COPPER: 1/2 OZ. FOR OTHER MATERIALS TRACE WIDTH AND GAP MAY NEED TO BE MODIFIED.
3. CHIP COMPONENT FOOT PRINTS SHOWN FOR REFERENCE. FOR COMPONENT VALUES REFER TO TB-TSY-83LNC+ OR TB-TSY-832LNC+.
4. COPPER LAYERS L2 & L3 OF THE PCB ARE CONTINUOUS GROUND PLANES.

DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)

DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

UNLESS OTHERWISE SPECIFIED

DIMENSIONS ARE IN INCHES

TOLERANCES ON:

2 PL DECIMALS ± .005

3 PL DECIMALS ± .005

ANGLES ±

FRACTIONS ±

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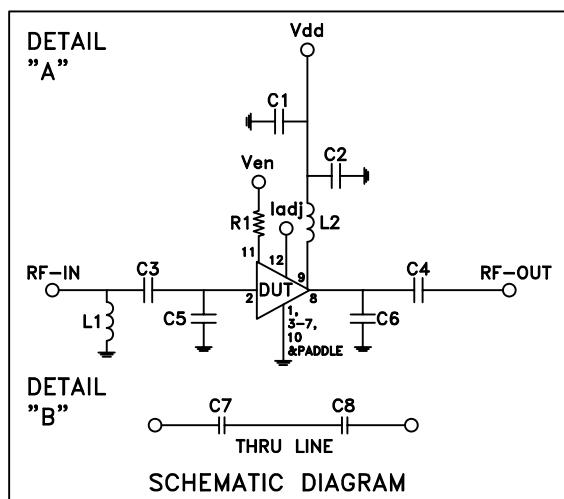
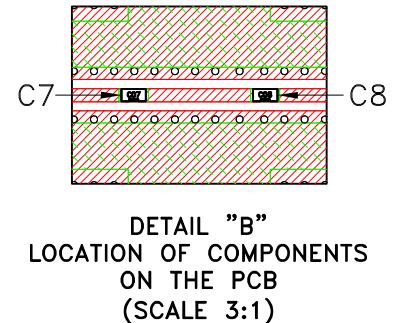
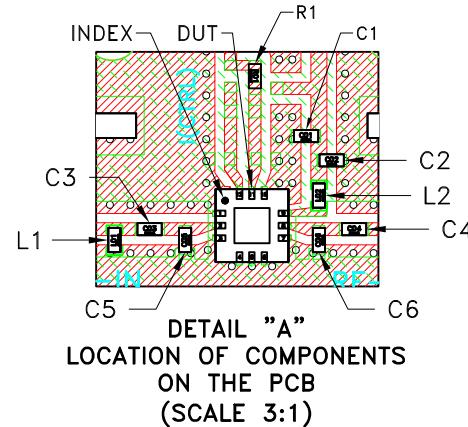
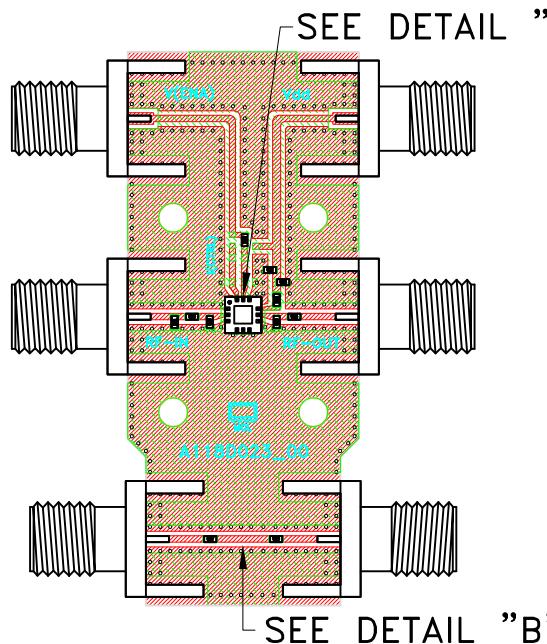
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Evaluation Board and Circuit



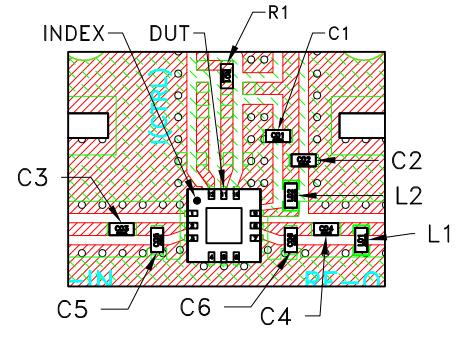
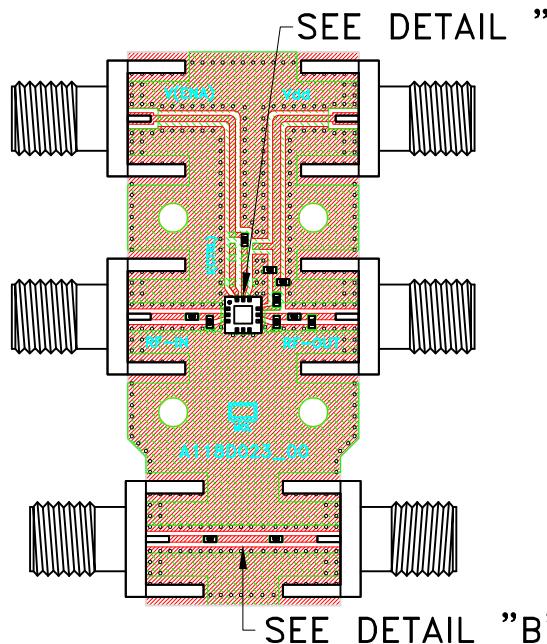
Component	Size	Value	Part Number	Manufacturer
C1	0402	0.01uF	GRM155R71E103KA01D	Murata
C2	0402	10pF	GJM1555C1H100JB01D	Murata
C3,C4,C7,C8	0402	100pF	GRM1555C1H101JA01D	Murata
C5	0402	0.4pF	CJM1555C1HR40WB01D	Murata
C6	0402	0.3pF	CJM1555C1HR30WB01D	Murata
R1	0402	0Ohm	RK73Z1ETTP	KOA Speer
L1	0402	22nH	LQG15HS22NG02D	Murata
L2	0402	39nH	0402CS-39NXGRW	Coilcraft

Notes:

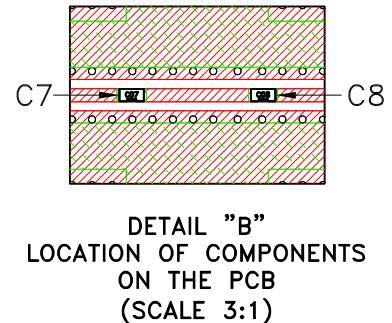
1. 50 Ohm SMA Female Connectors.
2. PCB Material: Roger R04350B or equivalent, Dielectric constant=3.5, Thickness=0.010 inch

 Mini-Circuits®

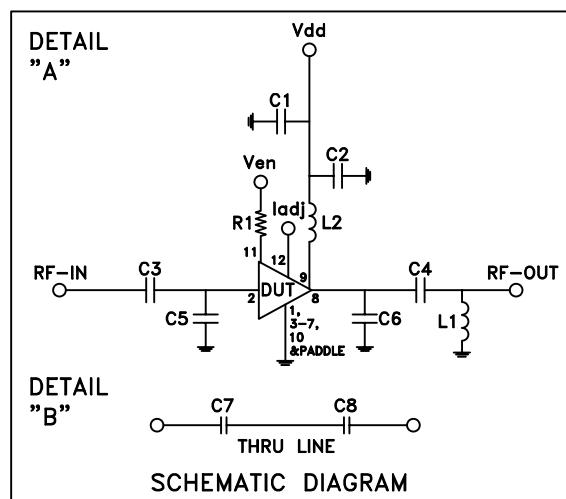
Evaluation Board and Circuit



DETAIL "A"
LOCATION OF COMPONENTS
ON THE PCB
(SCALE 3:1)



DETAIL "B"
LOCATION OF COMPONENTS
ON THE PCB
(SCALE 3:1)



SCHEMATIC DIAGRAM

Component	Size	Value	Part Number	Manufacturer
C1	0402	0.01uF	GRM155R71E103KA01D	Murata
C2	0402	10pF	GJM1555C1H100JB01D	Murata
C3,C4,C7,C8	0402	100pF	GRM1555C1H101JA01D	Murata
C5	0402	0.4pF	CJM1555C1HR40WB01D	Murata
C6	0402	0.3pF	CJM1555C1HR30WB01D	Murata
R1	0402	0Ohm	RK73Z1ETTP	KOA Speer
L1	0402	2nH	0402CS-2N0XGRW	Coilcraft
L2	0402	5.6nH	0402CS-5N6XGRW	Coilcraft

Notes:

1. 50 Ohm SMA Female Connectors.
2. PCB Material: Roger R04350B or equivalent, Dielectric constant=3.5, Thickness=0.010 inch

 Mini-Circuits®



Environmental Specifications

ENV08T1

All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

Specification	Test/Inspection Condition	Reference/Spec
Operating Temperature	-40° to 85° C or -45° to 85° C or -55° to 105° C or -40° to 105° C or -40° to 95° C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-55° to 100° C or -65° to 150° Ambient Environment	Individual Model Data Sheet
HTOL	1000 hours at 125°C	MIL-STD-883, Method 1005, Condition B
Thermal Shock	-55° to 100°C, 100 cycles	MIL-STD-202, Method 107, Condition A-3, except +100°C
Mechanical Shock	1.5Kg, 0.5 ms, 5 shock pulses, Y1 direction only	MIL-STD-883, Method 2002, Condition B, except Y1 direction only
Vibration (Variable Frequency)	50g peak	MIL-STD-883, Method 2007, Condition B
Autoclave	15 psig, 100% RH, 121°C, 96 hours	JESD22-A102, Condition C
HAST	130°C, 85% RH, 96 hours	JESD22-A110
Solderability	10X Magnification	J-STD-002, Para 4.2.5, Test S, 95% Coverage
Solder Reflow Heat	Sn-Pb Eutetic Process: 240°C peak Pb-Free Process: 260°C peak	J-STD-020, Table 4-1, 4-2 and 5-2; Figure 5-1
Moisture Sensitivity: Level 1	Bake at 125°C for 24 hours Soak at 85°C/85% RH for 168 hours, Reflow 3 cycles at 260°C peak	J-STD-020



All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

Specification	Test/Inspection Condition	Reference/Spec
Marking Resistance to Solvents	Isopropyl alcohol + mineral spirits at 25°C; terpene defluxer at 25°C; distilled water + propylene glycol monomethyl ether + monoethanolamine at 63°C to 70°C	MIL-STD-202, Method 215