NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)
Gain(Power Gain) = S21 (dB)
Isolation = S12 (dB)
Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{GG1} = -0.77 V, I_{GG1} = 0.22 mA , V_{GG2} = +3.5 V, I_{GG2} = 1.42 mA, V_{DD} = +9 V, I_{DD} = 304 mA @ Temperature = +25°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output P_{OUT} = +10 dBm	IP-3 Output P_{OUT} = +16 dBm	1dB Comp. Output	P_{SAT} Output	Noise Figure
(GHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
0.1	16.2	-63.4	-6.0	-6.4	136.0	1.0	37.7	26.7	22.3	26.0	20.9
0.2	17.2	-52.7	-9.3	-10.9	37.5	1.0	38.0	30.6	24.1	27.4	17.7
0.3	17.6	-61.6	-10.7	-10.7	91.3	1.0	36.6	33.3	24.7	28.1	15.1
0.4	15.9	-53.6	-11.7	-11.9	43.2	1.0	36.5	34.9	25.1	28.0	13.5
0.5	15.7	-53.7	-13.4	-13.5	45.4	1.0	36.6	35.8	25.3	28.1	12.1
0.6	15.6	-57.5	-14.2	-14.8	71.3	1.0	36.3	36.6	25.4	28.2	11.0
0.7	15.6	-59.9	-14.8	-15.8	93.4	1.0	36.6	37.9	25.9	28.6	9.9
0.8	15.6	-60.3	-15.2	-16.5	97.8	1.0	36.1	38.7	26.0	28.6	9.2
0.9	15.5	-75.0	-15.7	-17.1	532.2	1.0	36.1	39.7	26.1	28.7	8.6
1.0	15.5	-60.7	-16.1	-17.7	102.8	1.0	35.7	40.3	26.2	28.7	8.0
1.5	15.1	-62.2	-17.8	-20.7	127.4	1.0	35.9	42.1	26.9	29.3	6.2
2.0	14.7	-56.0	-20.8	-23.9	64.7	1.0	35.7	42.2	26.7	29.1	5.1
2.5	14.9	-58.9	-25.1	-24.1	88.6	1.0	35.8	41.8	26.7	29.2	4.5
3.0	14.6	-63.4	-25.3	-20.6	154.6	1.0	35.6	40.7	26.4	28.8	4.2
3.5	14.1	-54.5	-24.0	-18.6	58.1	1.0	35.5	41.2	26.4	28.8	3.6
4.0	14.1	-54.3	-24.1	-18.9	57.7	1.0	35.6	41.1	26.6	28.9	3.3
4.5	13.9	-52.2	-22.5	-21.1	46.2	1.0	35.4	40.6	26.6	28.9	3.1
5.0	13.6	-48.0	-18.7	-21.3	29.5	1.0	35.7	40.2	26.5	28.8	2.9
5.5	13.7	-49.3	-17.0	-18.5	33.8	1.0	35.4	40.0	26.4	28.7	2.7
6.0	13.8	-47.9	-17.8	-17.5	28.5	1.0	35.2	40.2	26.3	28.6	2.6
6.5	14.0	-47.3	-20.9	-19.0	26.6	1.0	35.2	39.6	26.4	28.7	2.6
7.0	14.2	-45.7	-23.3	-23.7	22.0	1.0	35.1	39.6	26.5	28.7	2.5
7.5	14.2	-44.9	-21.7	-30.5	20.1	1.0	34.7	39.0	26.3	28.5	2.6
8.0	14.3	-44.8	-22.2	-32.6	19.8	1.0	34.7	38.7	26.2	28.2	2.9
8.5	14.4	-44.0	-26.6	-40.8	18.1	1.0	34.1	39.0	26.2	28.1	2.9
9.0	14.3	-43.0	-24.8	-31.5	16.3	1.0	34.0	38.6	25.7	27.5	2.9
9.5	14.3	-42.5	-19.9	-22.5	15.6	1.0	34.1	38.2	25.7	27.2	2.9
10.0	14.1	-43.5	-18.4	-18.5	17.6	1.0	33.6	37.6	25.4	26.9	2.8
10.5	14.0	-42.7	-18.5	-17.0	16.3	1.0	33.7	37.8	25.2	26.8	2.8
11.0	13.9	-41.8	-17.9	-16.7	14.8	1.0	33.5	36.5	25.1	26.8	2.8
11.5	13.8	-41.2	-16.0	-16.7	13.9	1.0	33.7	36.8	25.2	26.9	2.9
12.0	13.8	-41.0	-14.7	-16.6	13.6	1.0	33.7	36.5	25.4	27.1	2.9
12.5	14.0	-40.1	-14.6	-16.3	12.1	1.0	33.7	36.0	25.3	27.1	2.9
13.0	14.2	-39.7	-16.2	-16.6	11.4	1.0	33.0	35.6	25.3	27.2	2.9
13.5	14.5	-38.7	-19.6	-18.0	10.1	1.0	32.5	36.1	25.3	27.4	3.0
14.0	14.8	-37.4	-25.3	-21.0	8.6	1.0	32.6	35.1	25.0	27.2	3.1
14.5	15.0	-37.7	-32.8	-27.3	8.9	1.0	32.0	35.3	24.8	27.2	3.3
15.0	15.1	-36.8	-41.7	-28.9	8.0	1.0	31.9	35.1	25.0	27.4	3.4
15.5	15.0	-36.8	-23.9	-23.5	8.1	1.0	31.0	35.0	24.5	27.0	3.4
16.0	14.8	-36.6	-17.6	-19.1	8.0	1.0	31.5	34.0	24.5	27.0	3.6
16.5	14.6	-35.8	-15.0	-16.5	7.4	1.0	31.7	33.6	24.4	26.8	3.4
17.0	14.4	-36.0	-14.2	-14.9	7.6	1.0	30.6	34.7	24.6	26.7	3.6
17.5	14.4	-35.9	-14.1	-13.6	7.5	1.0	31.5	33.6	24.7	26.7	3.6
18.0	14.5	-35.2	-14.5	-12.9	6.8	1.0	31.2	32.9	24.5	26.4	3.5
18.5	14.8	-34.4	-15.3	-13.0	6.1	1.0	31.0	32.2	24.4	26.2	3.6
19.0	15.3	-33.2	-17.4	-15.0	5.3	1.0	30.9	30.9	24.2	26.1	3.8
19.5	15.7	-32.9	-22.0	-19.2	5.0	1.0	30.8	31.0	23.8	25.7	3.8
20.0	15.9	-32.4	-25.8	-18.7	4.7	1.0	30.7	31.2	23.9	25.9	4.2
20.5	15.8	-32.2	-19.8	-16.0	4.6	1.0	29.8	29.8	23.7	25.6	4.3
21.0	15.8	-32.1	-14.8	-16.7	4.5	1.0	29.7	27.9	23.3	25.3	4.4
21.5	15.5	-32.2	-12.2	-17.7	4.6	1.0	30.0	28.0	23.1	25.0	4.5
22.0	15.3	-31.5	-11.8	-14.2	4.4	1.0	31.1	27.7	23.1	24.7	4.2
22.5	15.3	-31.3	-13.8	-12.8	4.4	1.0	30.2	26.8	22.6	24.3	4.3
23.0	15.5	-30.5	-16.5	-14.7	4.1	1.0	29.3	25.8	22.0	23.8	4.4
23.5	16.1	-29.8	-19.3	-16.8	3.7	1.0	29.7	24.6	21.8	23.7	4.8
24.0	16.5	-29.5	-18.7	-13.8	3.4	0.9	29.2	23.6	21.6	23.4	5.3

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)
Gain(Power Gain) = S21 (dB)
Isolation = S12 (dB)
Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{GG1} = -0.77 V, I_{GG1} = 0.22 mA , V_{GG2} = +3.5 V, I_{GG2} = 1.42 mA, V_{DD} = +10 V, I_{DD} = 303 mA @ Temperature = +25°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output P_{OUT} = +10 dBm	IP-3 Output P_{OUT} = +16 dBm	1dB Comp. Output	P_{SAT} Output	Noise Figure
(GHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
0.1	16.1	-64.3	-6.0	-6.4	151.4	1.0	37.4	27.9	23.2	26.5	20.9
0.2	17.1	-64.8	-9.3	-11.0	151.1	1.0	38.4	33.8	25.1	28.0	17.6
0.3	17.5	-52.1	-10.7	-10.7	31.0	1.0	37.2	37.4	25.9	28.7	15.2
0.4	15.9	-59.8	-11.6	-12.0	89.5	1.0	36.4	38.3	26.1	28.6	13.5
0.5	15.7	-63.9	-13.3	-13.5	148.0	1.0	36.6	38.8	26.2	28.6	12.2
0.6	15.6	-63.9	-14.2	-14.8	148.6	1.0	36.8	39.7	26.4	28.8	10.9
0.7	15.6	-58.1	-14.8	-15.8	76.3	1.0	36.5	40.1	26.8	29.1	10.0
0.8	15.6	-63.3	-15.3	-16.5	138.9	1.0	36.3	40.6	26.8	29.1	9.2
0.9	15.5	-63.9	-15.7	-17.1	149.1	1.0	36.0	41.4	27.0	29.3	9.2
1.0	15.4	-62.6	-16.0	-17.7	128.5	1.0	36.1	41.7	27.0	29.3	7.9
1.5	15.0	-62.4	-17.7	-20.9	131.4	1.0	36.1	42.4	27.4	29.7	6.2
2.0	14.7	-64.0	-20.7	-24.3	163.7	1.0	35.6	42.8	27.3	29.5	5.1
2.5	14.8	-63.7	-25.0	-24.4	155.5	1.0	36.5	42.5	27.3	29.6	4.5
3.0	14.5	-61.3	-25.3	-20.6	121.8	1.0	35.9	42.3	27.0	29.2	4.1
3.5	14.1	-56.1	-24.0	-18.6	69.9	1.0	35.7	42.2	26.9	29.1	3.6
4.0	14.0	-51.4	-24.2	-19.0	41.5	1.0	35.7	41.8	27.0	29.2	3.2
4.5	13.8	-51.8	-22.4	-21.1	44.7	1.0	35.7	41.3	26.9	29.1	3.0
5.0	13.6	-49.6	-18.7	-21.3	35.7	1.0	35.6	41.1	26.8	29.0	2.9
5.5	13.6	-48.5	-17.1	-18.5	31.1	1.0	35.6	41.4	26.7	28.9	2.7
6.0	13.8	-46.8	-17.8	-17.5	25.4	1.0	35.3	40.7	26.7	28.9	2.6
6.5	14.0	-44.8	-21.0	-19.1	20.1	1.0	35.3	40.4	26.8	28.9	2.6
7.0	14.1	-45.7	-23.5	-23.7	22.3	1.0	35.1	40.2	26.8	29.0	2.6
7.5	14.2	-46.0	-21.7	-30.4	22.9	1.0	34.8	39.7	26.7	28.7	2.5
8.0	14.3	-44.2	-22.3	-32.0	18.6	1.0	34.5	39.3	26.7	28.5	2.8
8.5	14.3	-44.0	-26.7	-40.3	18.2	1.0	33.4	39.4	26.6	28.3	2.9
9.0	14.2	-44.0	-24.8	-31.8	18.5	1.0	33.7	38.5	26.2	27.7	2.8
9.5	14.2	-43.8	-19.9	-22.5	18.2	1.0	33.7	38.6	26.1	27.3	3.0
10.0	14.0	-43.3	-18.3	-18.5	17.3	1.0	33.7	38.2	25.8	27.1	2.9
10.5	13.9	-41.7	-18.4	-17.0	14.6	1.0	33.4	37.9	25.6	26.9	2.8
11.0	13.8	-41.5	-17.8	-16.6	14.5	1.0	33.6	37.5	25.5	26.9	2.8
11.5	13.7	-41.6	-16.0	-16.6	14.8	1.0	33.6	37.7	25.6	27.0	2.9
12.0	13.7	-41.3	-14.7	-16.5	14.1	1.0	33.2	37.2	25.6	27.2	2.9
12.5	13.9	-39.7	-14.6	-16.3	11.6	1.0	33.1	37.3	25.7	27.3	2.9
13.0	14.1	-39.1	-16.3	-16.5	10.8	1.0	32.5	37.6	25.6	27.4	2.9
13.5	14.5	-38.3	-19.8	-17.9	9.7	1.0	32.3	37.8	25.7	27.6	3.0
14.0	14.7	-38.2	-25.4	-21.1	9.6	1.0	32.0	37.9	25.4	27.4	3.1
14.5	14.9	-37.4	-32.8	-27.0	8.7	1.0	31.6	37.7	25.3	27.5	3.2
15.0	15.0	-37.3	-39.7	-27.9	8.5	1.0	31.1	37.1	25.5	27.7	3.4
15.5	14.9	-36.8	-23.6	-22.7	8.2	1.0	30.6	37.2	25.0	27.3	3.5
16.0	14.7	-36.4	-17.5	-18.8	7.9	1.0	31.3	36.6	25.0	27.3	3.5
16.5	14.4	-36.0	-14.9	-16.2	7.6	1.0	30.6	36.1	24.9	27.2	3.5
17.0	14.3	-36.0	-14.1	-14.6	7.7	1.0	29.9	37.0	25.0	26.8	3.7
17.5	14.3	-35.5	-14.1	-13.4	7.2	1.0	31.2	36.1	25.1	27.0	3.5
18.0	14.4	-35.0	-14.5	-12.8	6.8	1.0	30.5	35.4	24.9	26.8	3.7
18.5	14.7	-34.0	-15.4	-12.9	5.9	1.0	30.4	34.9	24.8	26.5	3.7
19.0	15.1	-33.5	-17.7	-15.1	5.5	1.0	30.0	33.2	24.6	26.5	3.7
19.5	15.6	-32.7	-22.3	-19.4	5.0	1.0	29.9	33.1	24.2	26.1	4.0
20.0	15.7	-32.2	-25.9	-18.4	4.7	1.0	29.3	33.4	24.4	26.3	4.3
20.5	15.7	-32.0	-19.6	-15.8	4.5	1.0	29.2	32.2	24.2	26.1	4.4
21.0	15.6	-32.2	-14.7	-16.4	4.6	1.0	28.5	30.5	23.9	25.7	4.5
21.5	15.3	-31.6	-12.1	-17.2	4.4	1.0	29.1	30.4	23.8	25.4	4.4
22.0	15.1	-31.6	-11.8	-13.8	4.5	1.0	29.3	29.7	23.6	25.1	4.2
22.5	15.1	-31.2	-14.0	-12.7	4.4	1.0	29.0	28.3	23.1	24.7	4.4
23.0	15.4	-30.6	-16.9	-14.8	4.2	1.0	28.4	27.2	22.4	24.2	4.6
23.5	15.9	-29.6	-20.1	-17.0	3.7	1.0	28.4	25.9	22.2	24.1	5.0
24.0	16.3	-29.2	-18.3	-14.0	3.3	1.0	27.4	25.0	21.9	23.9	5.4

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)
Gain(Power Gain) = S21 (dB)
Isolation = S12 (dB)
Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{GG1} = -0.77 V, I_{GG1} = 0.22 mA , V_{GG2} = +3.5 V, I_{GG2} = 1.42 mA, V_{DD} = +11 V, I_{DD} = 303 mA @ Temperature = +25°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output P_{OUT} = +10 dBm	IP-3 Output P_{OUT} = +16 dBm	1dB Comp. Output	P_{SAT} Output	Noise Figure
(GHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
0.1	16.1	-59.9	-6.0	-6.3	91.4	1.0	35.6	28.5	23.4	26.9	20.9
0.2	17.1	-58.6	-9.3	-11.0	74.5	1.0	37.5	35.2	25.6	28.5	17.7
0.3	17.5	-62.8	-10.7	-10.8	105.8	1.0	37.6	36.7	26.5	29.2	15.2
0.4	15.9	-60.5	-11.7	-11.9	96.9	1.0	37.6	37.8	26.5	29.0	13.4
0.5	15.6	-56.6	-13.3	-13.6	64.2	1.0	37.5	38.2	26.6	29.0	12.3
0.6	15.5	-61.8	-14.2	-14.9	117.5	1.0	36.9	38.7	26.7	29.2	11.0
0.7	15.5	-69.9	-14.8	-15.9	298.6	1.0	37.2	39.2	27.0	29.5	10.0
0.8	15.5	-68.8	-15.2	-16.7	261.0	1.0	36.7	39.8	27.0	29.5	9.3
0.9	15.5	-66.4	-15.6	-17.2	200.3	1.0	37.1	40.3	27.2	29.6	8.6
1.0	15.4	-65.7	-16.0	-17.9	184.8	1.0	36.4	40.6	27.2	29.6	8.0
1.5	15.0	-66.0	-17.7	-21.1	200.4	1.0	36.5	41.4	27.4	29.8	6.3
2.0	14.6	-65.0	-20.7	-24.6	184.4	1.0	36.5	41.7	27.2	29.7	5.2
2.5	14.8	-57.3	-25.0	-24.6	74.9	1.0	37.2	42.0	27.2	29.8	4.6
3.0	14.4	-55.2	-25.3	-20.8	60.8	1.0	36.6	41.2	26.9	29.4	4.1
3.5	14.0	-55.0	-24.0	-18.7	62.6	1.0	36.1	41.1	26.8	29.2	3.7
4.0	13.9	-51.9	-24.2	-19.1	44.5	1.0	36.2	40.9	26.9	29.3	3.3
4.5	13.8	-51.1	-22.5	-21.2	41.4	1.0	36.2	40.0	26.8	29.2	3.0
5.0	13.5	-50.2	-18.7	-21.4	38.3	1.0	36.5	40.0	26.6	29.0	3.0
5.5	13.5	-48.5	-17.1	-18.5	31.4	1.0	36.0	39.8	26.5	28.9	2.7
6.0	13.7	-47.9	-17.9	-17.5	28.7	1.0	36.1	39.7	26.6	28.9	2.7
6.5	13.9	-46.3	-21.0	-19.1	24.1	1.0	36.3	39.2	26.6	29.0	2.6
7.0	14.0	-45.8	-23.4	-23.7	22.6	1.0	35.7	39.3	26.7	28.9	2.7
7.5	14.1	-44.4	-21.8	-30.1	19.2	1.0	35.9	39.1	26.6	28.7	2.5
8.0	14.2	-43.8	-22.4	-31.6	17.9	1.0	35.3	38.7	26.6	28.5	2.9
8.5	14.3	-43.9	-26.7	-39.1	18.2	1.0	34.7	38.6	26.5	28.2	3.0
9.0	14.2	-43.5	-24.7	-32.2	17.5	1.0	34.5	37.8	26.1	27.6	3.1
9.5	14.1	-44.2	-19.8	-22.5	19.3	1.0	34.7	38.2	25.9	27.3	3.0
10.0	14.0	-41.7	-18.3	-18.5	14.5	1.0	34.2	37.7	25.6	27.0	2.9
10.5	13.8	-42.5	-18.4	-16.9	16.2	1.0	34.3	37.3	25.5	26.9	2.9
11.0	13.8	-42.5	-17.8	-16.6	16.5	1.0	34.5	36.9	25.4	26.8	2.8
11.5	13.7	-40.8	-15.9	-16.5	13.6	1.0	34.0	36.7	25.4	26.9	2.9
12.0	13.6	-40.1	-14.7	-16.5	12.4	1.0	33.9	36.5	25.5	27.1	2.9
12.5	13.8	-39.4	-14.7	-16.2	11.4	1.0	34.1	36.6	25.6	27.3	2.9
13.0	14.1	-39.2	-16.3	-16.5	11.0	1.0	33.5	37.1	25.5	27.4	3.0
13.5	14.4	-38.4	-19.8	-17.9	10.0	1.0	32.7	37.1	25.6	27.6	3.1
14.0	14.7	-37.9	-25.7	-21.1	9.3	1.0	32.5	37.4	25.4	27.5	3.1
14.5	14.8	-37.4	-33.5	-26.7	8.8	1.0	32.7	36.8	25.3	27.6	3.3
15.0	14.9	-36.5	-40.3	-27.1	7.9	1.0	31.7	36.4	25.4	27.8	3.4
15.5	14.8	-36.4	-23.4	-22.2	7.9	1.0	31.4	36.8	25.0	27.5	3.5
16.0	14.6	-36.2	-17.4	-18.4	7.8	1.0	31.8	36.0	24.9	27.4	3.6
16.5	14.3	-35.8	-14.9	-15.9	7.5	1.0	31.5	35.5	24.8	27.2	3.6
17.0	14.2	-35.7	-14.1	-14.4	7.4	1.0	30.8	36.1	24.9	26.8	3.7
17.5	14.2	-35.2	-14.1	-13.2	7.0	1.0	31.6	35.1	25.0	27.1	3.6
18.0	14.3	-34.2	-14.6	-12.6	6.2	1.0	31.7	34.6	24.7	26.8	3.8
18.5	14.6	-33.7	-15.4	-12.9	5.8	1.0	30.8	33.7	24.6	26.5	3.8
19.0	15.1	-33.4	-17.8	-15.1	5.5	1.0	30.3	32.4	24.4	26.6	3.9
19.5	15.5	-32.5	-22.7	-19.2	5.0	1.0	30.3	32.0	24.0	26.2	4.0
20.0	15.6	-32.0	-25.9	-18.0	4.6	1.0	29.8	32.2	24.1	26.3	4.3
20.5	15.6	-31.6	-19.4	-15.5	4.4	1.0	29.9	31.1	23.9	26.1	4.5
21.0	15.5	-31.7	-14.6	-16.2	4.5	1.0	28.9	29.8	23.7	25.8	4.5
21.5	15.2	-31.9	-12.0	-16.8	4.6	1.0	29.4	29.8	23.6	25.5	4.4
22.0	14.9	-31.7	-11.8	-13.6	4.6	1.0	30.0	28.9	23.4	25.1	4.3
22.5	14.9	-31.1	-14.1	-12.7	4.4	1.0	29.8	27.6	22.8	24.7	4.4
23.0	15.2	-30.7	-17.4	-14.8	4.3	1.0	29.1	26.3	22.0	24.2	4.7
23.5	15.7	-30.0	-20.5	-17.1	3.9	1.0	28.3	25.2	21.7	24.2	5.0
24.0	16.0	-29.2	-17.9	-14.2	3.4	1.0	27.6	24.1	21.4	23.9	5.3

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)
Gain(Power Gain) = S21 (dB)
Isolation = S12 (dB)
Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{GG1} = -0.77 V, I_{GG1} = 0.22 mA , V_{GG2} = +3.5 V, I_{GG2} = 1.42 mA, V_{DD} = +9 V, I_{DD} = 327 mA @ Temperature = -45°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output P_{OUT} = +10 dBm	IP-3 Output P_{OUT} = +16 dBm	1dB Comp. Output	P_{SAT} Output	Noise Figure
(GHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
0.1	17.1	-70.5	-5.5	-5.6	273.2	0.9	32.4	27.1	23.3	26.7	19.3
0.2	18.0	-67.5	-8.8	-9.9	192.2	1.0	39.0	30.3	24.6	27.7	16.7
0.3	18.4	-73.0	-10.2	-9.9	316.2	1.0	37.9	32.1	25.2	28.1	14.2
0.4	16.8	-58.5	-11.2	-11.3	72.0	1.0	36.4	33.1	25.5	28.1	12.7
0.5	16.6	-64.0	-12.8	-12.9	140.4	1.0	36.3	33.8	25.6	28.0	11.4
0.6	16.4	-70.8	-13.7	-14.3	312.9	1.0	35.7	34.4	25.7	28.2	10.3
0.7	16.4	-63.3	-14.4	-15.3	130.2	1.0	35.7	35.5	26.2	28.5	9.3
0.8	16.4	-78.4	-14.8	-16.1	742.3	1.0	35.7	36.9	26.2	28.4	8.5
0.9	16.3	-63.6	-15.2	-16.8	135.2	1.0	35.6	38.2	26.3	28.6	7.8
1.0	16.3	-63.4	-15.6	-17.6	133.0	1.0	35.4	39.0	26.4	28.6	7.2
1.5	15.9	-64.0	-17.5	-21.7	149.8	1.0	35.3	43.3	27.0	29.2	5.5
2.0	15.5	-60.9	-20.7	-26.1	107.9	1.0	35.0	43.6	26.8	29.1	4.5
2.5	15.7	-76.1	-27.0	-25.6	606.3	1.0	35.7	43.2	26.9	29.4	3.9
3.0	15.4	-60.3	-26.5	-20.8	100.2	1.0	35.4	42.5	26.6	29.0	3.6
3.5	14.9	-55.5	-24.3	-18.9	60.9	1.0	35.1	42.5	26.7	29.0	3.2
4.0	14.9	-49.4	-24.0	-18.6	30.3	1.0	35.2	43.0	26.9	29.2	2.9
4.5	14.8	-51.4	-20.9	-20.0	38.8	1.0	34.7	42.1	26.9	29.2	2.6
5.0	14.4	-49.6	-17.6	-19.8	32.4	1.0	34.8	42.8	26.8	29.1	2.3
5.5	14.4	-47.8	-16.1	-17.6	26.1	1.0	35.0	42.4	26.6	28.8	2.2
6.0	14.6	-48.5	-16.9	-16.7	27.7	1.0	35.1	41.5	26.7	28.8	2.1
6.5	14.8	-46.8	-19.9	-18.1	22.8	1.0	35.3	41.0	26.8	29.0	1.9
7.0	14.9	-45.5	-23.2	-22.5	19.8	1.0	34.8	41.5	26.9	29.0	2.0
7.5	15.0	-44.8	-21.9	-30.1	18.3	1.0	34.2	40.9	26.8	28.8	2.1
8.0	15.1	-45.7	-22.0	-34.5	20.1	1.0	33.9	39.6	26.7	28.6	2.0
8.5	15.2	-44.1	-25.3	-40.3	16.7	1.0	34.0	40.3	26.7	28.5	2.1
9.0	15.2	-43.9	-23.1	-29.5	16.5	1.0	33.5	39.7	26.3	27.9	2.3
9.5	15.1	-43.6	-18.7	-21.8	16.1	1.0	33.3	39.1	26.2	27.6	2.4
10.0	14.9	-42.5	-17.6	-18.1	14.2	1.0	33.4	38.2	25.9	27.5	2.2
10.5	14.8	-41.7	-18.1	-16.9	13.2	1.0	33.1	38.8	25.7	27.4	2.2
11.0	14.7	-41.6	-17.5	-17.2	13.2	1.0	33.6	37.1	25.7	27.4	2.1
11.5	14.6	-42.0	-15.6	-17.1	13.9	1.0	33.3	37.5	25.7	27.4	2.2
12.0	14.6	-41.9	-14.4	-16.7	13.7	1.0	32.8	37.6	25.8	27.6	2.2
12.5	14.7	-40.4	-14.4	-16.2	11.3	1.0	32.7	36.0	25.8	27.6	2.3
13.0	15.0	-39.3	-16.1	-16.7	9.9	1.0	32.8	36.0	25.8	27.7	2.1
13.5	15.3	-37.9	-19.7	-18.1	8.4	1.0	32.3	36.0	25.7	27.8	2.2
14.0	15.6	-37.8	-24.8	-20.7	8.2	1.0	32.1	35.5	25.4	27.6	2.2
14.5	15.8	-37.9	-29.7	-24.1	8.1	1.0	31.6	35.7	25.2	27.7	2.3
15.0	15.9	-37.1	-48.2	-28.3	7.4	1.0	31.1	35.7	25.3	27.9	2.5
15.5	15.8	-36.9	-24.7	-25.8	7.3	1.0	30.7	35.1	24.8	27.5	2.5
16.0	15.7	-36.7	-18.2	-20.6	7.1	1.0	31.3	34.3	24.8	27.4	2.6
16.5	15.5	-36.1	-15.2	-17.7	6.8	1.0	30.7	34.3	24.7	27.2	2.6
17.0	15.3	-35.9	-14.1	-15.4	6.6	1.0	30.8	35.8	24.9	27.0	2.8
17.5	15.2	-34.9	-14.0	-13.6	5.9	1.0	31.2	34.8	25.0	27.0	2.8
18.0	15.3	-34.6	-14.3	-12.9	5.7	1.0	31.1	34.6	24.8	26.8	2.7
18.5	15.6	-34.3	-14.4	-12.8	5.4	1.0	30.9	34.1	24.7	26.5	2.7
19.0	16.0	-33.9	-15.6	-13.6	5.0	1.0	30.8	31.6	24.5	26.4	2.8
19.5	16.4	-33.4	-20.0	-16.4	4.7	1.0	30.0	31.2	24.0	25.9	2.9
20.0	16.8	-32.1	-28.1	-20.3	4.0	1.0	29.9	31.7	24.1	26.1	2.9
20.5	16.8	-32.0	-23.1	-16.4	4.0	1.0	29.4	30.2	24.0	25.9	3.1
21.0	16.7	-31.9	-15.8	-15.2	3.9	1.0	28.6	28.3	23.6	25.6	3.4
21.5	16.5	-32.3	-12.0	-18.9	4.1	1.0	29.2	28.1	23.2	25.3	3.5
22.0	16.2	-32.0	-10.9	-14.7	4.0	1.0	29.9	28.0	23.2	25.0	3.5
22.5	16.2	-31.4	-12.7	-12.0	3.8	1.0	29.4	27.2	22.8	24.5	3.2
23.0	16.4	-30.8	-15.5	-13.7	3.7	1.0	28.8	26.3	22.3	24.1	3.1
23.5	16.9	-30.0	-15.9	-16.7	3.3	1.0	29.1	25.2	22.2	24.0	3.4
24.0	17.5	-29.4	-17.6	-12.8	2.9	0.9	28.5	23.9	22.1	23.8	3.7

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)
Gain(Power Gain) = S21 (dB)
Isolation = S12 (dB)
Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{GG1} = -0.77 V, I_{GG1} = 0.22 mA , V_{GG2} = +3.5 V, I_{GG2} = 1.42 mA, V_{DD} = +10 V, I_{DD} = 327 mA @ Temperature = -45°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output P_{OUT} = +10 dBm	IP-3 Output P_{OUT} = +16 dBm	1dB Comp. Output	P_{SAT} Output	Noise Figure
(GHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
0.1	17.0	-66.7	-5.5	-5.5	180.6	0.9	35.3	28.4	24.3	27.4	19.3
0.2	17.9	-58.1	-8.8	-9.8	65.8	1.0	38.8	33.7	25.8	28.5	16.6
0.3	18.3	-54.8	-10.2	-9.9	39.8	1.0	37.1	37.8	26.5	28.9	14.2
0.4	16.7	-69.3	-11.3	-11.3	253.6	1.0	36.4	39.4	26.7	28.8	12.7
0.5	16.4	-62.5	-12.9	-12.9	120.6	1.0	35.8	40.2	26.8	28.8	11.5
0.6	16.3	-78.1	-13.8	-14.2	731.6	1.0	35.6	40.9	27.0	28.9	10.2
0.7	16.3	-75.5	-14.4	-15.3	543.5	1.0	36.0	41.3	27.4	29.2	9.3
0.8	16.3	-62.4	-14.8	-16.2	119.2	1.0	35.3	41.5	27.4	29.2	8.5
0.9	16.2	-68.9	-15.2	-16.8	253.2	1.0	35.7	41.6	27.5	29.3	8.6
1.0	16.1	-68.2	-15.6	-17.6	235.8	1.0	35.3	41.8	27.6	29.3	7.2
1.5	15.7	-67.1	-17.4	-21.9	218.0	1.0	35.5	41.2	28.0	29.8	5.4
2.0	15.4	-60.0	-20.7	-26.5	98.8	1.0	35.3	41.4	27.9	29.8	4.4
2.5	15.5	-60.4	-26.8	-25.9	100.7	1.0	35.5	41.4	27.9	30.0	3.8
3.0	15.2	-55.5	-26.7	-20.9	58.9	1.0	35.4	41.8	27.6	29.6	3.7
3.5	14.8	-52.8	-24.3	-18.9	45.2	1.0	35.2	41.5	27.5	29.5	3.2
4.0	14.7	-50.9	-24.0	-18.7	36.7	1.0	34.9	41.5	27.7	29.7	2.8
4.5	14.6	-48.7	-20.9	-20.0	29.0	1.0	35.2	41.3	27.6	29.7	2.5
5.0	14.3	-49.4	-17.6	-19.8	32.3	1.0	34.8	40.8	27.5	29.6	2.4
5.5	14.3	-47.2	-16.2	-17.5	24.7	1.0	35.1	41.2	27.4	29.3	2.2
6.0	14.5	-47.3	-16.9	-16.7	24.6	1.0	34.6	41.0	27.5	29.3	2.1
6.5	14.6	-47.0	-19.9	-18.1	23.8	1.0	34.8	40.9	27.5	29.4	2.1
7.0	14.8	-45.5	-23.3	-22.5	20.2	1.0	34.8	39.9	27.6	29.5	2.0
7.5	14.8	-45.6	-22.0	-30.3	20.4	1.0	34.2	39.5	27.5	29.2	1.9
8.0	15.0	-45.1	-22.2	-34.2	19.1	1.0	33.9	39.6	27.4	29.0	2.0
8.5	15.0	-44.1	-25.4	-40.9	16.9	1.0	33.1	38.9	27.4	28.8	2.1
9.0	15.0	-43.8	-22.9	-29.8	16.5	1.0	33.0	38.6	26.9	28.2	2.3
9.5	14.9	-43.9	-18.7	-21.7	16.9	1.0	33.4	38.6	26.9	27.9	2.3
10.0	14.7	-43.8	-17.6	-18.0	16.8	1.0	33.2	38.5	26.6	27.8	2.3
10.5	14.6	-42.8	-18.0	-16.9	15.1	1.0	33.1	38.0	26.5	27.7	2.2
11.0	14.5	-42.3	-17.5	-17.1	14.5	1.0	33.0	38.3	26.4	27.7	2.2
11.5	14.4	-40.9	-15.7	-17.0	12.5	1.0	32.8	38.3	26.4	27.7	2.1
12.0	14.4	-41.0	-14.4	-16.6	12.6	1.0	32.8	37.7	26.5	27.9	2.1
12.5	14.6	-40.0	-14.5	-16.1	11.1	1.0	33.0	38.0	26.5	27.9	2.2
13.0	14.8	-38.9	-16.2	-16.7	9.7	1.0	32.1	38.1	26.5	28.1	2.1
13.5	15.2	-38.3	-19.9	-18.2	8.9	1.0	31.9	37.6	26.5	28.2	2.2
14.0	15.4	-37.9	-25.1	-20.6	8.4	1.0	31.8	38.2	26.2	28.1	2.2
14.5	15.6	-37.8	-30.5	-24.2	8.2	1.0	31.4	37.5	26.1	28.1	2.4
15.0	15.7	-36.9	-43.1	-27.8	7.4	1.0	30.7	37.0	26.3	28.3	2.5
15.5	15.6	-36.5	-24.3	-24.9	7.1	1.0	30.3	37.0	25.8	27.9	2.5
16.0	15.5	-36.8	-18.1	-20.1	7.4	1.0	30.9	37.7	25.8	28.0	2.6
16.5	15.3	-36.3	-15.1	-17.4	7.0	1.0	30.9	37.5	25.7	27.8	2.8
17.0	15.1	-35.7	-14.1	-15.1	6.6	1.0	30.3	37.8	25.9	27.6	2.7
17.5	15.0	-35.3	-14.0	-13.4	6.3	1.0	31.1	37.7	25.9	27.7	2.6
18.0	15.2	-34.8	-14.4	-12.9	5.9	1.0	30.7	38.4	25.8	27.4	2.8
18.5	15.4	-33.7	-14.5	-12.7	5.1	1.0	30.2	38.4	25.6	27.1	2.7
19.0	15.8	-33.5	-15.9	-13.6	4.9	1.0	30.0	38.5	25.4	27.0	2.8
19.5	16.3	-33.0	-20.4	-16.4	4.6	1.0	29.4	37.7	25.0	26.6	2.8
20.0	16.6	-32.6	-29.5	-20.3	4.3	1.0	29.2	36.9	25.2	26.8	3.0
20.5	16.6	-31.9	-22.8	-16.1	4.0	1.0	28.7	37.0	25.1	26.7	3.3
21.0	16.5	-31.8	-15.5	-15.0	3.9	1.0	28.3	34.5	24.8	26.4	3.4
21.5	16.3	-31.6	-11.7	-18.6	3.8	1.0	28.4	34.0	24.6	26.1	3.6
22.0	16.0	-31.6	-10.9	-14.2	3.9	1.0	28.6	33.2	24.4	25.8	3.5
22.5	15.9	-31.2	-12.9	-11.9	3.8	1.0	28.6	31.8	24.0	25.3	3.3
23.0	16.2	-30.5	-15.9	-13.8	3.6	1.0	28.3	30.4	23.4	24.9	3.2
23.5	16.7	-30.0	-16.5	-16.8	3.4	1.0	28.2	29.0	23.2	24.8	3.5
24.0	17.2	-29.3	-17.7	-12.9	2.9	0.9	27.2	27.6	23.0	24.6	3.8

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)
Gain(Power Gain) = S21 (dB)
Isolation = S12 (dB)
Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{GG1} = -0.77 V, I_{GG1} = 0.22 mA , V_{GG2} = +3.5 V, I_{GG2} = 1.42 mA, V_{DD} = +11 V, I_{DD} = 327 mA @ Temperature = -45°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output P_{OUT} = +10 dBm	IP-3 Output P_{OUT} = +16 dBm	1dB Comp. Output	P_{SAT} Output	Noise Figure
(GHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
0.1	16.9	-61.8	-5.5	-5.5	103.3	0.9	34.0	29.4	24.7	28.0	19.4
0.2	17.9	-58.3	-8.8	-9.9	68.0	1.0	38.0	36.3	26.3	29.1	16.6
0.3	18.3	-60.3	-10.2	-10.0	74.9	1.0	36.3	37.7	27.1	29.6	14.4
0.4	16.6	-56.0	-11.2	-11.3	55.0	1.0	36.2	39.3	27.4	29.5	12.7
0.5	16.4	-75.0	-12.8	-12.9	509.7	1.0	36.0	39.6	27.5	29.4	11.4
0.6	16.3	-69.7	-13.7	-14.3	280.3	1.0	36.2	40.2	27.6	29.5	10.3
0.7	16.3	-64.4	-14.3	-15.4	151.5	1.0	36.3	40.5	27.9	29.8	9.3
0.8	16.2	-64.4	-14.8	-16.3	151.8	1.0	36.2	40.6	27.9	29.7	8.4
0.9	16.2	-74.4	-15.3	-17.0	480.3	1.0	36.2	40.8	28.1	29.9	7.9
1.0	16.1	-74.1	-15.6	-17.7	468.9	1.0	36.0	40.7	28.1	29.8	7.2
1.5	15.7	-60.5	-17.4	-22.0	102.1	1.0	36.0	41.0	28.3	30.2	5.4
2.0	15.3	-62.1	-20.7	-27.0	127.0	1.0	36.2	41.2	28.2	30.1	4.4
2.5	15.5	-57.8	-26.9	-26.3	75.6	1.0	36.2	41.3	28.2	30.3	4.0
3.0	15.2	-55.4	-26.5	-21.2	58.4	1.0	36.1	41.3	27.9	30.0	3.6
3.5	14.7	-56.6	-24.3	-19.1	70.3	1.0	36.0	41.3	27.7	29.9	3.3
4.0	14.7	-51.6	-24.0	-18.8	40.2	1.0	35.9	41.1	27.9	30.0	2.8
4.5	14.5	-49.8	-21.0	-20.1	33.1	1.0	36.0	41.1	27.8	29.9	2.6
5.0	14.2	-49.8	-17.7	-19.8	34.0	1.0	35.7	41.7	27.7	29.7	2.4
5.5	14.2	-48.1	-16.2	-17.6	27.8	1.0	35.9	41.1	27.6	29.6	2.1
6.0	14.4	-47.3	-16.9	-16.6	25.0	1.0	36.3	40.9	27.7	29.5	2.0
6.5	14.6	-46.4	-20.0	-18.1	22.4	1.0	35.7	40.7	27.7	29.6	2.0
7.0	14.7	-46.0	-23.4	-22.5	21.5	1.0	34.9	39.9	27.8	29.6	2.0
7.5	14.8	-45.5	-22.0	-30.1	20.2	1.0	35.2	39.3	27.7	29.4	2.1
8.0	14.9	-44.8	-22.2	-33.6	18.7	1.0	34.6	39.0	27.6	29.2	2.0
8.5	15.0	-43.7	-25.4	-41.2	16.5	1.0	34.3	38.2	27.5	28.9	2.1
9.0	14.9	-45.1	-23.0	-30.3	19.4	1.0	34.2	38.5	27.1	28.3	2.3
9.5	14.8	-43.3	-18.6	-21.9	15.9	1.0	34.2	38.2	26.9	28.0	2.3
10.0	14.7	-43.7	-17.5	-18.1	16.7	1.0	33.8	37.9	26.7	27.8	2.4
10.5	14.6	-43.2	-18.0	-16.8	16.0	1.0	33.8	37.8	26.6	27.8	2.2
11.0	14.5	-41.4	-17.5	-17.1	13.2	1.0	33.8	37.6	26.5	27.7	2.2
11.5	14.4	-41.5	-15.6	-16.9	13.5	1.0	34.1	37.6	26.5	27.8	2.3
12.0	14.3	-40.7	-14.4	-16.5	12.3	1.0	33.5	37.1	26.6	28.0	2.2
12.5	14.5	-39.8	-14.5	-16.0	10.9	1.0	33.7	36.8	26.6	28.1	2.2
13.0	14.8	-38.9	-16.2	-16.6	9.7	1.0	33.3	36.7	26.7	28.2	2.2
13.5	15.1	-38.3	-20.0	-18.1	9.0	1.0	32.6	36.2	26.7	28.4	2.3
14.0	15.4	-37.7	-25.2	-20.6	8.2	1.0	32.6	36.5	26.5	28.3	2.3
14.5	15.5	-37.1	-31.0	-23.9	7.6	1.0	32.3	36.1	26.4	28.4	2.5
15.0	15.6	-36.6	-40.6	-27.3	7.2	1.0	31.8	35.9	26.5	28.6	2.5
15.5	15.6	-36.2	-24.1	-24.3	6.9	1.0	31.4	36.0	26.1	28.2	2.7
16.0	15.4	-36.1	-17.9	-19.7	6.9	1.0	31.6	36.1	26.1	28.3	2.7
16.5	15.2	-35.6	-14.9	-17.1	6.5	1.0	31.2	36.1	26.0	28.2	2.8
17.0	15.0	-35.3	-14.0	-14.9	6.4	1.0	30.8	36.4	26.1	27.7	2.8
17.5	15.0	-35.3	-14.0	-13.2	6.4	1.0	32.1	37.0	26.2	28.0	2.8
18.0	15.1	-34.2	-14.4	-12.7	5.6	1.0	31.7	36.7	26.0	27.8	2.7
18.5	15.3	-34.2	-14.6	-12.6	5.4	1.0	31.5	37.0	25.8	27.5	2.7
19.0	15.7	-33.7	-15.9	-13.5	5.0	1.0	30.8	37.6	25.7	27.4	2.8
19.5	16.2	-32.5	-20.9	-16.5	4.3	1.0	30.1	36.1	25.3	27.0	2.9
20.0	16.5	-32.4	-29.8	-20.0	4.3	1.0	30.3	35.6	25.4	27.2	3.0
20.5	16.5	-31.9	-22.7	-15.8	4.0	1.0	29.6	35.8	25.3	27.1	3.2
21.0	16.4	-31.8	-15.4	-14.8	4.0	1.0	28.8	35.6	25.1	26.8	3.5
21.5	16.1	-31.5	-11.7	-18.3	3.8	1.0	29.3	35.6	24.9	26.5	3.5
22.0	15.9	-31.2	-10.8	-13.9	3.8	1.0	29.8	35.1	24.7	26.1	3.5
22.5	15.8	-31.1	-13.0	-11.7	3.8	1.0	29.4	33.3	24.2	25.6	3.3
23.0	16.1	-30.5	-16.3	-13.8	3.7	1.0	28.9	31.3	23.6	25.2	3.3
23.5	16.6	-29.5	-16.9	-16.7	3.3	1.0	28.4	29.8	23.3	25.2	3.6
24.0	17.1	-29.0	-17.6	-12.8	2.9	0.9	27.6	28.3	23.0	24.9	3.9

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)
Gain(Power Gain) = S21 (dB)
Isolation = S12 (dB)
Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{GG1} = -0.77 V, I_{GG1} = 0.22 mA , V_{GG2} = +3.5 V, I_{GG2} = 1.42 mA, V_{DD} = +9 V, I_{DD} = 302 mA @ Temperature = +85°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output P_{OUT} = +10 dBm	IP-3 Output P_{OUT} = +16 dBm	1dB Comp. Output	P_{SAT} Output	Noise Figure
(GHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
0.1	15.2	-56.0	-5.5	-5.6	63.1	0.9	33.8	27.1	22.7	26.3	22.0
0.2	16.5	-59.9	-8.8	-10.0	92.9	1.0	38.0	31.3	24.4	27.8	18.4
0.3	16.9	-66.1	-10.1	-10.0	166.2	1.0	38.3	33.9	25.1	28.4	15.6
0.4	15.3	-51.8	-11.2	-11.3	38.4	1.0	37.4	35.2	25.2	28.1	14.0
0.5	15.0	-62.4	-12.8	-12.8	134.3	1.0	37.1	35.9	25.2	28.0	12.7
0.6	14.9	-69.4	-13.7	-14.2	303.4	1.0	38.0	36.5	25.4	28.1	11.4
0.7	15.0	-62.2	-14.3	-15.2	131.8	1.0	37.4	37.2	25.8	28.4	10.4
0.8	14.9	-58.5	-14.7	-15.9	85.8	1.0	37.2	37.9	25.8	28.3	9.7
0.9	14.9	-63.5	-15.1	-16.6	153.0	1.0	37.2	38.4	25.9	28.5	10.1
1.0	14.8	-64.7	-15.5	-17.1	176.5	1.0	37.3	38.8	26.0	28.4	8.5
1.5	14.4	-61.7	-17.3	-20.5	130.3	1.0	37.3	40.1	26.4	28.7	6.7
2.0	14.1	-66.2	-20.0	-24.7	224.8	1.0	36.9	40.2	26.3	28.6	5.8
2.5	14.2	-57.4	-23.9	-24.7	80.3	1.0	37.3	39.6	26.3	28.6	5.2
3.0	13.8	-57.9	-25.6	-21.3	88.8	1.0	37.4	39.1	26.0	28.2	4.9
3.5	13.4	-53.3	-25.1	-19.1	54.7	1.0	36.9	39.1	25.9	28.1	4.3
4.0	13.3	-51.2	-25.2	-19.3	43.5	1.0	37.0	38.9	26.1	28.2	3.9
4.5	13.2	-52.7	-23.6	-21.8	53.2	1.0	36.5	38.3	26.0	28.1	3.8
5.0	12.9	-50.0	-19.7	-22.1	40.1	1.0	37.2	38.5	25.9	28.1	3.4
5.5	13.0	-50.1	-17.7	-19.1	40.2	1.0	37.0	38.3	25.8	28.0	3.4
6.0	13.1	-47.0	-18.3	-18.0	28.1	1.0	36.5	38.0	25.8	28.0	3.3
6.5	13.3	-46.5	-21.4	-19.5	26.4	1.0	36.3	37.9	25.8	28.0	3.3
7.0	13.4	-46.3	-23.6	-24.3	25.7	1.0	36.0	38.2	25.8	28.0	3.3
7.5	13.5	-45.4	-21.8	-30.6	23.1	1.0	35.7	37.8	25.7	27.8	3.3
8.0	13.6	-44.3	-22.2	-31.2	20.4	1.0	35.5	37.6	25.6	27.6	3.5
8.5	13.7	-44.7	-26.7	-38.5	21.5	1.0	34.9	37.8	25.6	27.4	3.6
9.0	13.6	-43.5	-25.4	-30.7	19.0	1.0	34.7	36.9	25.1	26.8	3.7
9.5	13.5	-43.4	-20.5	-22.4	18.8	1.0	35.1	36.9	25.0	26.5	3.7
10.0	13.3	-42.5	-18.9	-18.6	17.3	1.0	35.2	36.3	24.7	26.2	3.7
10.5	13.2	-42.5	-18.8	-16.8	17.5	1.0	34.5	36.4	24.4	26.0	3.6
11.0	13.1	-42.2	-18.1	-16.3	17.0	1.0	34.2	35.1	24.3	26.0	3.7
11.5	13.1	-42.0	-16.4	-16.4	16.7	1.0	34.2	35.3	24.4	26.0	3.6
12.0	13.1	-40.0	-15.2	-16.7	13.3	1.0	34.2	35.3	24.5	26.3	3.7
12.5	13.2	-40.4	-15.1	-16.7	13.7	1.0	34.0	34.5	24.5	26.3	3.7
13.0	13.5	-39.2	-16.3	-17.0	11.8	1.0	33.7	34.5	24.4	26.4	3.8
13.5	13.8	-38.2	-19.5	-18.2	10.4	1.0	33.1	34.6	24.4	26.5	3.9
14.0	14.1	-37.9	-26.3	-21.4	10.0	1.0	32.9	33.9	24.1	26.4	3.9
14.5	14.2	-37.3	-37.6	-30.4	9.4	1.0	32.4	33.7	23.9	26.4	4.0
15.0	14.3	-36.5	-37.9	-25.9	8.6	1.0	32.2	33.5	24.1	26.5	4.2
15.5	14.1	-36.4	-25.0	-20.2	8.5	1.0	31.6	33.2	23.5	26.2	4.4
16.0	14.0	-36.9	-18.1	-18.0	9.2	1.0	32.2	32.6	23.6	26.1	4.5
16.5	13.7	-36.6	-15.0	-16.5	9.0	1.0	31.3	32.5	23.5	26.0	4.6
17.0	13.6	-35.9	-14.3	-14.6	8.3	1.0	30.6	32.8	23.6	25.8	4.6
17.5	13.6	-35.0	-14.6	-13.1	7.6	1.0	31.9	32.0	23.7	25.8	4.5
18.0	13.8	-35.6	-15.4	-12.9	7.9	1.0	31.7	31.5	23.4	25.6	4.6
18.5	14.1	-34.2	-16.6	-13.6	6.7	1.0	31.1	31.1	23.3	25.4	4.6
19.0	14.5	-33.4	-18.9	-16.6	6.0	1.0	31.3	30.0	22.9	25.2	4.8
19.5	14.9	-32.5	-23.3	-20.7	5.4	1.0	32.2	30.1	22.5	24.8	5.0
20.0	15.0	-32.6	-24.9	-17.0	5.3	1.0	30.7	30.1	22.8	25.0	5.3
20.5	15.0	-31.9	-18.9	-15.0	4.9	1.0	30.9	28.8	22.4	24.7	5.4
21.0	14.9	-31.8	-14.1	-17.1	4.9	1.0	29.6	27.2	22.1	24.4	5.5
21.5	14.6	-31.9	-12.0	-16.4	5.0	1.0	31.2	27.2	21.8	24.1	5.2
22.0	14.3	-31.8	-12.7	-12.9	5.1	1.0	32.4	26.7	21.7	23.7	5.2
22.5	14.4	-31.2	-15.8	-13.1	4.9	1.0	30.9	25.9	21.2	23.3	5.3
23.0	14.8	-30.4	-17.9	-16.7	4.5	1.0	29.9	24.9	20.7	22.9	5.7
23.5	15.2	-29.8	-19.6	-16.1	4.1	1.0	30.1	23.9	20.4	22.7	6.1
24.0	15.4	-29.4	-16.7	-13.8	3.8	1.0	29.2	23.2	20.0	22.4	6.4

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)
Gain(Power Gain) = S21 (dB)
Isolation = S12 (dB)
Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{GG1} = -0.77 V, I_{GG1} = 0.22 mA , V_{GG2} = +3.5 V, I_{GG2} = 1.42 mA, V_{DD} = +10 V, I_{DD} = 302 mA @ Temperature = +85°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output P_{OUT} = +10 dBm	IP-3 Output P_{OUT} = +16 dBm	1dB Comp. Output	P_{SAT} Output	Noise Figure
(GHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
0.1	15.1	-57.7	-5.6	-5.6	77.8	0.9	34.3	28.2	23.5	26.9	21.9
0.2	16.3	-59.0	-8.9	-10.0	85.2	1.0	37.5	34.3	25.4	28.4	18.4
0.3	16.8	-63.9	-10.2	-10.0	131.2	1.0	37.5	36.8	26.1	29.0	15.7
0.4	15.1	-75.0	-11.3	-11.3	564.2	1.0	37.3	37.1	26.0	28.7	14.1
0.5	14.9	-60.5	-12.9	-12.8	109.5	1.0	37.7	37.5	26.0	28.5	12.8
0.6	14.8	-58.6	-13.7	-14.2	88.9	1.0	38.5	38.0	26.1	28.6	11.4
0.7	14.8	-65.6	-14.3	-15.2	197.1	1.0	37.8	38.2	26.3	28.8	10.4
0.8	14.8	-63.9	-14.7	-15.9	161.6	1.0	37.6	38.9	26.3	28.8	9.7
0.9	14.8	-63.3	-15.1	-16.6	151.8	1.0	37.9	39.3	26.5	28.9	8.3
1.0	14.6	-64.2	-15.6	-17.1	168.9	1.0	37.6	39.4	26.4	28.8	8.4
1.5	14.2	-67.6	-17.3	-20.5	260.8	1.0	37.9	40.4	26.7	29.0	6.8
2.0	13.9	-58.0	-20.0	-24.7	89.5	1.0	37.8	40.5	26.5	28.8	5.9
2.5	14.0	-67.5	-23.9	-24.7	262.6	1.0	37.9	40.1	26.5	28.8	5.1
3.0	13.7	-54.3	-25.8	-21.3	59.7	1.0	37.8	39.6	26.2	28.5	4.8
3.5	13.3	-56.2	-25.3	-19.1	77.6	1.0	37.1	39.4	26.1	28.3	4.3
4.0	13.2	-51.6	-25.4	-19.3	46.5	1.0	37.3	39.3	26.2	28.4	3.9
4.5	13.0	-49.6	-23.8	-21.8	38.0	1.0	37.8	38.7	26.1	28.3	3.7
5.0	12.8	-49.6	-19.6	-22.1	38.9	1.0	37.8	38.8	25.9	28.2	3.5
5.5	12.8	-48.9	-17.7	-19.1	35.8	1.0	37.0	38.5	25.8	28.1	3.3
6.0	13.0	-47.7	-18.4	-18.0	30.9	1.0	37.1	38.3	25.9	28.1	3.2
6.5	13.1	-45.6	-21.4	-19.5	24.1	1.0	37.4	38.1	25.9	28.1	3.3
7.0	13.3	-45.5	-23.8	-24.3	24.0	1.0	37.0	38.3	26.0	28.2	3.3
7.5	13.4	-45.1	-21.9	-30.6	22.7	1.0	36.3	38.1	25.9	28.0	3.4
8.0	13.5	-45.0	-22.3	-31.2	22.5	1.0	35.3	37.6	25.8	27.7	3.5
8.5	13.5	-44.6	-26.6	-38.5	21.6	1.0	35.2	37.8	25.7	27.5	3.8
9.0	13.5	-43.5	-25.5	-30.7	19.2	1.0	35.3	37.3	25.3	26.9	3.7
9.5	13.4	-43.9	-20.6	-22.4	20.3	1.0	35.3	37.3	25.2	26.6	3.6
10.0	13.2	-42.8	-18.9	-18.6	18.0	1.0	35.4	36.4	24.8	26.3	3.8
10.5	13.1	-42.3	-18.7	-16.8	17.4	1.0	34.7	36.7	24.6	26.1	3.7
11.0	13.0	-42.0	-18.2	-16.3	17.0	1.0	34.6	36.0	24.5	26.0	3.7
11.5	12.9	-40.9	-16.4	-16.4	15.2	1.0	35.1	35.8	24.6	26.1	3.7
12.0	12.9	-40.6	-15.2	-16.7	14.6	1.0	34.2	35.7	24.6	26.3	3.7
12.5	13.1	-40.0	-15.1	-16.7	13.3	1.0	34.6	35.4	24.6	26.4	3.8
13.0	13.3	-39.1	-16.3	-17.0	11.9	1.0	33.7	35.7	24.6	26.5	3.8
13.5	13.7	-38.4	-19.7	-18.2	10.9	1.0	33.5	35.8	24.6	26.7	3.9
14.0	13.9	-37.8	-26.7	-21.4	10.1	1.0	33.3	35.4	24.4	26.6	4.0
14.5	14.1	-37.6	-38.1	-30.4	9.9	1.0	33.1	35.2	24.2	26.6	4.1
15.0	14.1	-36.8	-36.3	-25.9	9.1	1.0	32.4	34.7	24.3	26.8	4.3
15.5	14.0	-36.4	-24.8	-20.2	8.7	1.0	31.7	34.6	23.9	26.4	4.3
16.0	13.8	-36.5	-18.0	-18.0	8.9	1.0	32.1	33.7	23.9	26.4	4.5
16.5	13.5	-36.2	-15.0	-16.5	8.7	1.0	32.3	33.5	23.8	26.2	4.5
17.0	13.4	-36.0	-14.3	-14.6	8.6	1.0	30.8	33.8	23.8	25.8	4.6
17.5	13.4	-35.6	-14.6	-13.1	8.2	1.0	31.4	32.9	23.9	26.0	4.5
18.0	13.6	-34.8	-15.4	-12.9	7.4	1.0	31.7	32.3	23.7	25.8	4.6
18.5	13.9	-33.5	-16.8	-13.6	6.3	1.0	31.7	31.8	23.5	25.6	4.8
19.0	14.4	-33.1	-19.2	-16.6	5.9	1.0	31.6	30.8	23.2	25.5	4.8
19.5	14.7	-32.9	-23.6	-20.7	5.7	1.0	31.3	30.7	22.8	25.1	5.0
20.0	14.8	-32.6	-25.0	-17.0	5.4	1.0	31.0	30.7	23.0	25.3	5.2
20.5	14.7	-32.1	-18.7	-15.0	5.1	1.0	30.7	29.6	22.7	25.0	5.4
21.0	14.6	-31.6	-14.0	-17.1	4.9	1.0	29.8	28.4	22.4	24.7	5.6
21.5	14.3	-31.9	-11.9	-16.4	5.1	1.0	30.9	28.2	22.3	24.4	5.4
22.0	14.0	-31.3	-12.8	-12.9	5.0	1.0	31.8	27.3	22.0	24.0	5.3
22.5	14.1	-31.0	-16.0	-13.1	4.9	1.0	30.9	26.4	21.5	23.5	5.4
23.0	14.5	-30.4	-18.3	-16.7	4.7	1.0	30.0	25.3	20.9	23.1	5.7
23.5	14.9	-29.6	-20.1	-16.1	4.2	1.0	29.4	24.3	20.6	23.0	6.2
24.0	15.1	-29.5	-16.2	-13.8	4.0	1.0	28.6	23.5	20.1	22.7	6.5

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)
Gain(Power Gain) = S21 (dB)
Isolation = S12 (dB)
Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{GG1} = -0.77 V, I_{GG1} = 0.22 mA , V_{GG2} = +3.5 V, I_{GG2} = 1.42 mA, V_{DD} = +11 V, I_{DD} = 302 mA @ Temperature = +85°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output P_{OUT} = +10 dBm	IP-3 Output P_{OUT} = +16 dBm	1dB Comp. Output	P_{SAT} Output	Noise Figure
(GHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
0.1	15.2	-62.6	-5.5	-5.6	135.8	0.9	33.4	29.7	23.8	27.3	22.0
0.2	16.4	-84.7	-8.8	-10.1	1636.7	1.0	36.6	35.4	25.9	28.9	18.4
0.3	16.8	-58.4	-10.1	-10.0	69.5	1.0	37.1	36.7	26.7	29.5	15.8
0.4	15.2	-55.1	-11.2	-11.3	56.6	1.0	38.8	37.4	26.3	29.1	14.1
0.5	14.9	-69.0	-12.7	-12.9	289.5	1.0	37.8	37.7	26.3	28.9	12.7
0.6	14.9	-65.6	-13.6	-14.3	197.5	1.0	38.9	38.0	26.3	28.9	11.5
0.7	14.9	-64.8	-14.2	-15.3	178.5	1.0	38.3	38.4	26.5	29.1	10.5
0.8	14.8	-71.3	-14.7	-16.0	379.6	1.0	38.3	38.9	26.6	29.0	9.7
0.9	14.8	-67.0	-15.1	-16.7	230.7	1.0	38.5	39.3	26.6	29.1	8.9
1.0	14.7	-64.2	-15.5	-17.3	167.6	1.0	38.1	39.6	26.6	29.1	8.5
1.5	14.3	-57.3	-17.2	-20.6	79.7	1.0	38.4	40.3	26.7	29.1	6.9
2.0	13.9	-58.5	-19.8	-25.0	94.0	1.0	38.4	40.6	26.5	28.9	5.8
2.5	14.1	-65.4	-23.8	-25.2	205.4	1.0	38.3	40.1	26.5	28.9	5.3
3.0	13.7	-60.3	-25.6	-21.5	118.8	1.0	38.8	39.6	26.2	28.6	4.8
3.5	13.3	-57.5	-25.0	-19.2	90.0	1.0	38.3	39.4	26.1	28.3	4.4
4.0	13.2	-51.7	-25.3	-19.4	47.0	1.0	38.4	39.3	26.1	28.4	4.0
4.5	13.0	-51.7	-23.7	-22.0	48.5	1.0	38.4	38.5	26.0	28.3	3.8
5.0	12.8	-50.9	-19.6	-22.2	45.4	1.0	37.9	38.7	25.9	28.1	3.7
5.5	12.8	-48.2	-17.6	-19.2	33.1	1.0	38.4	38.6	25.8	28.0	3.4
6.0	13.0	-47.2	-18.2	-18.0	29.0	1.0	38.4	38.4	25.8	28.1	3.4
6.5	13.1	-46.6	-21.4	-19.5	27.0	1.0	38.3	38.0	25.9	28.1	3.3
7.0	13.3	-45.3	-23.7	-24.3	23.5	1.0	37.7	38.1	25.9	28.1	3.4
7.5	13.4	-45.1	-21.8	-30.3	22.8	1.0	37.0	37.9	25.9	27.9	3.5
8.0	13.5	-44.7	-22.3	-30.6	21.6	1.0	37.1	37.8	25.8	27.7	3.6
8.5	13.5	-43.9	-26.8	-36.7	20.0	1.0	35.5	38.1	25.7	27.4	3.7
9.0	13.4	-44.0	-25.5	-30.7	20.4	1.0	36.5	37.3	25.3	26.9	3.8
9.5	13.3	-42.9	-20.4	-22.3	18.1	1.0	36.2	37.2	25.2	26.5	3.8
10.0	13.2	-42.6	-18.8	-18.4	17.7	1.0	35.6	36.4	24.8	26.2	3.7
10.5	13.0	-41.7	-18.6	-16.6	16.3	1.0	36.0	36.3	24.6	26.0	3.6
11.0	12.9	-41.7	-18.0	-16.1	16.5	1.0	36.1	35.9	24.5	26.0	3.7
11.5	12.9	-40.8	-16.4	-16.1	14.9	1.0	35.3	36.0	24.5	26.0	3.7
12.0	12.9	-40.5	-15.2	-16.4	14.5	1.0	35.4	35.6	24.6	26.3	3.8
12.5	13.0	-39.8	-15.1	-16.5	13.2	1.0	35.0	35.5	24.7	26.4	3.8
13.0	13.3	-38.8	-16.4	-16.9	11.6	1.0	35.0	35.9	24.6	26.5	3.8
13.5	13.6	-37.9	-19.8	-18.1	10.3	1.0	34.4	36.2	24.7	26.7	4.0
14.0	13.9	-37.5	-26.7	-21.5	9.9	1.0	34.0	35.8	24.4	26.6	4.0
14.5	14.0	-37.7	-40.4	-29.5	10.1	1.0	34.0	35.6	24.3	26.7	4.2
15.0	14.1	-36.8	-35.9	-24.6	9.1	1.0	33.4	35.1	24.4	26.8	4.4
15.5	13.9	-36.5	-24.4	-19.3	8.8	1.0	32.6	35.0	24.0	26.5	4.4
16.0	13.7	-36.1	-17.8	-17.3	8.6	1.0	33.3	34.0	23.9	26.5	4.6
16.5	13.5	-35.9	-14.9	-15.8	8.6	1.0	32.5	33.5	23.8	26.3	4.6
17.0	13.3	-35.4	-14.3	-14.2	8.1	1.0	30.9	34.1	23.8	25.8	4.7
17.5	13.3	-35.5	-14.5	-12.9	8.2	1.0	31.8	33.2	23.9	26.1	4.7
18.0	13.5	-34.7	-15.4	-12.7	7.4	1.0	32.8	32.4	23.6	25.8	4.6
18.5	13.8	-34.3	-16.8	-13.5	7.0	1.0	31.5	31.8	23.5	25.6	4.7
19.0	14.3	-33.4	-19.4	-16.8	6.2	1.0	32.1	30.8	23.1	25.6	4.8
19.5	14.6	-32.3	-24.3	-20.8	5.4	1.0	32.7	30.6	22.7	25.2	5.1
20.0	14.7	-31.8	-24.9	-16.4	5.0	1.0	32.3	30.6	22.9	25.3	5.4
20.5	14.6	-31.8	-18.4	-14.9	5.0	1.0	32.0	29.5	22.6	25.0	5.7
21.0	14.5	-31.6	-13.8	-16.9	5.0	1.0	30.6	28.4	22.4	24.7	5.8
21.5	14.1	-31.6	-11.8	-15.5	5.1	1.0	31.9	28.2	22.3	24.4	5.5
22.0	13.8	-31.4	-12.8	-12.6	5.1	1.0	33.3	27.1	22.0	24.0	5.4
22.5	13.9	-30.8	-16.3	-13.2	4.9	1.0	31.1	26.3	21.4	23.5	5.7
23.0	14.3	-30.5	-18.8	-17.3	4.8	1.0	30.8	25.2	20.7	23.1	5.9
23.5	14.7	-29.7	-20.3	-16.5	4.3	1.0	29.6	24.2	20.4	23.0	6.3
24.0	14.7	-29.2	-15.7	-14.7	4.0	1.0	28.6	23.4	19.9	22.6	6.7