Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

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

TEST CONDITIONS: V_{DD} = +12 V, I_{DD} = 400 mA @ Temperature = +25°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output	1dB Comp. Output	3dB Comp. Output	Psat Output	Noise Figure	2nd Harmonic	3rd Harmonic
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)
10	17.9	-50.04	-23.43	-24.41	32.23	1.00	42.45	28.20	31.30	32.90	28.17	-60.95	-107.21
100	16.1	-69.16	-22.52	-11.18	164.23	0.93	45.96	28.90	31.20	32.30	18.50	-57.34	-110.29
300	14.4	-62.67	-19.98	-10.00	189.18	0.91	47.64	29.60	31.10	32.20	8.78	-58.61	-107.21
500	13.7	-57.59	-18.91	-9.70	67.51	0.91	46.94	29.60	31.10	32.10	6.82	-53.59	-92.21
700	13.0	-53.45	-17.78	-9.34	44.13	0.90	46.44	29.94	31.10	32.25	5.81	-47.48	-87.35
900	12.8	-51.67	-16.45	-9.51	38.89	0.91	45.77	30.26	31.40	32.67	5.36	-43.72	-86.20
1000	12.6	-51.59	-15.95	-9.67	39.42	0.92	45.31	30.45	31.50	32.79	5.06	-42.43	-82.90
1200	12.7	-48.68	-14.25	-10.03	28.86	0.93	45.55	30.65	31.60	33.12	4.76	-42.49	-78.16
1400	12.5	-48.63	-13.22	-10.38	27.25	0.95	45.07	30.80	31.70	33.25	4.54	-44.31	-94.49
1600	12.4	-47.94	-12.42	-10.80	25.46	0.97	45.05	30.69	31.50	33.01	4.16	-44.49	-94.53
1800	12.3	-46.43	-11.88	-11.27	22.52	0.98	44.47	30.62	31.50	32.96	4.01	-43.68	-93.69
2000	12.2	-46.10	-11.58	-11.75	21.44	1.00	44.96	30.64	31.98	32.99	3.79	-42.58	-87.28
2200	12.2	-45.38	-11.56	-12.19	20.47	1.01	44.89	30.56	31.85	32.83	3.56	-42.88	-94.15
2400	12.2	-45.61	-11.82	-12.44	19.69	1.01	44.98	30.74	32.06	33.03	3.27	-44.40	-90.42
2600	12.2	-44.73	-12.37	-12.48	18.74	1.00	45.05	30.90	32.26	33.28	3.28	-43.99	-79.69
2800	12.2	-43.59	-13.28	-12.30	17.32	0.99	44.99	30.90	32.30	33.34	2.88	-41.04	-77.10
3000	12.2	-42.70	-14.62	-11.86	15.75	0.97	45.04	30.90	32.30	33.30	2.67	-39.10	-77.20
3200	12.2	-42.73	-16.56	-11.36	15.58	0.95	44.74	30.90	32.30	33.28	2.73	-39.85	-74.94
3400	12.1	-42.55	-19.25	-10.77	15.06	0.93	44.69	31.01	32.44	33.41	2.64	-41.81	-72.89
3600	12.1	-41.85	-23.19	-10.26	13.88	0.91	44.51	30.99	32.45	33.45	2.69	-42.81	-76.56
3800	12.1	-41.22	-28.29	-9.82	13.14	0.90	44.56	31.11	32.56	33.57	2.68	-41.65	-76.85
4000	12.0	-41.07	-27.91	-9.48	13.10	0.89	44.52	31.24	32.77	33.78	2.68	-40.55	-74.71
4200	11.9	-40.76	-23.95	-9.28	12.29	0.89	44.35	31.16	32.71	33.67	2.68	-41.14	-76.22
4400	11.9	-40.71	-21.34	-9.24	12.21	0.89	44.09	31.09	32.67	33.61	2.72	-42.00	-76.17
4600	11.8	-40.20	-19.85	-9.33	11.68	0.90	43.89	31.08	32.71	33.66	2.72	-40.97	-71.46
4800	11.8	-39.78	-19.06	-9.54	11.06	0.91	43.39	30.96	32.51	33.45	2.74	-38.06	-73.85
5000	11.8	-39.45	-18.97	-9.92	10.84	0.92	43.07	30.95	32.40	33.43	2.74	-36.21	-75.04
5200	11.8	-39.04	-19.41	-10.43	10.52	0.93	42.73	31.06	32.46	33.54	2.71	-37.06	-73.22
5400	11.8	-38.75	-20.35	-11.04	10.12	0.94	42.70	31.00	32.33	33.45	2.65	-39.22	-76.02
5600	11.9	-38.24	-21.64	-11.69	9.77	0.94	42.55	31.02	32.32	33.50	2.68	-40.74	-81.45
5800	11.9	-37.64	-22.80	-12.40	9.29	0.95	42.60	31.10	32.40	33.62	2.70	-40.17	-80.29
6000	11.9	-37.41	-24.81	-13.12	9.05	0.96	42.32	30.93	32.28	33.55	2.69	-39.98	-80.28
6200	11.9	-37.10	-25.52	-13.70	8.73	0.96	41.97	30.93	32.32	33.61	2.79	-40.55	-83.45
6400	11.9	-37.08	-24.87	-14.10	8.70	0.96	41.86	31.02	32.46	33.82	2.72	-41.12	-80.81
6600	11.8	-36.64	-23.83	-14.38	8.43	0.96	41.83	30.88	32.35	33.59	2.77	-39.95	-77.61
6800	11.8	-36.30	-22.99	-14.46	8.12	0.96	41.90	30.79	32.37	33.56	2.83	-37.58	-84.07
7000	11.7	-35.87	-22.84	-14.49	7.89	0.96	41.62	30.81	32.34	33.56	2.93	-37.52	-84.81

Typical Performance Data

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

TEST CONDITIONS: V_{DD} = +12 V, I_{DD} = 400 mA @ Temperature = -45°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output	Noise Figure
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dB)
10	18.77	-59.10	-24.73	-25.09	39.31	1.00	45.38	26.11
100	16.72	-69.60	-23.07	-11.76	283.96	0.94	44.80	18.89
300	14.96	-58.55	-20.11	-10.46	114.88	0.92	41.69	7.88
500	14.26	-56.92	-18.89	-10.05	60.67	0.91	41.69	5.85
700	13.64	-54.23	-17.61	-9.59	42.29	0.91	41.40	4.96
900	13.31	-53.53	-16.21	-9.77	42.03	0.92	41.17	4.50
1000	13.16	-53.95	-15.75	-9.88	44.98	0.92	41.21	4.18
1200	13.19	-50.22	-14.04	-10.15	30.79	0.94	41.11	3.96
1400	13.01	-49.62	-13.02	-10.34	29.16	0.95	41.10	3.71
1600	12.89	-48.19	-12.23	-10.65	25.78	0.97	41.24	3.44
1800	12.80	-47.53	-11.69	-11.16	24.66	0.98	41.04	3.26
2000	12.74	-47.18	-11.39	-11.79	22.50	1.00	41.25	3.03
2200	12.71	-46.62	-11.38	-12.40	21.60	1.01	41.29	2.80
2400	12.70	-45.73	-11.61	-12.80	20.38	1.01	41.38	2.82
2600	12.70	-44.96	-12.07	-12.93	18.96	1.01	41.44	2.51
2800	12.69	-45.18	-12.95	-12.70	18.35	1.00	41.51	2.20
3000	12.71	-44.19	-14.15	-12.22	16.92	0.98	41.53	2.07
3200	12.69	-43.36	-15.99	-11.54	15.84	0.96	41.42	2.11
3400	12.68	-43.22	-18.62	-10.69	15.07	0.93	41.40	1.96
3600	12.62	-42.61	-22.53	-9.96	14.36	0.91	41.32	2.00
3800	12.58	-42.24	-28.62	-9.37	13.57	0.89	41.28	2.00
4000	12.52	-41.48	-30.16	-8.93	12.63	0.88	41.20	1.96
4200	12.49	-41.79	-25.26	-8.82	12.60	0.88	41.07	2.04
4400	12.47	-41.33	-22.14	-8.99	11.90	0.88	40.97	2.00
4600	12.46	-41.08	-20.23	-9.29	11.72	0.90	40.77	2.02
4800	12.44	-40.58	-19.09	-9.65	11.18	0.91	40.55	2.06
5000	12.43	-40.23	-18.63	-10.08	10.85	0.92	40.31	2.04
5200	12.41	-39.90	-18.72	-10.48	10.72	0.93	40.04	2.03
5400	12.43	-39.30	-19.36	-11.00	10.11	0.94	39.83	1.98
5600	12.45	-39.20	-20.44	-11.44	10.08	0.94	39.72	1.99
5800	12.46	-38.66	-21.28	-11.85	9.57	0.95	39.71	2.04
6000	12.46	-38.33	-23.26	-12.35	9.13	0.95	39.64	2.04
6200	12.46	-37.99	-24.19	-12.86	9.03	0.95	39.51	2.03
6400	12.45	-37.66	-23.89	-13.41	8.58	0.96	39.54	2.06
6600	12.43	-37.31	-23.28	-13.92	8.42	0.96	39.47	2.04
6800	12.40	-36.93	-22.56	-14.31	8.17	0.96	39.84	2.12
7000	12.37	-36.54	-22.28	-14.57	7.81	0.96	39.53	2.16

Typical Performance Data

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

TEST CONDITIONS: V_{DD} = +12 V, I_{DD} = 400 mA @ Temperature = +85°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output	Noise Figure
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dB)
10	17.31	-54.93	-23.13	-22.40	37.91	1.00	40.97	29.59
100	15.56	-66.07	-22.09	-11.04	227.57	0.93	42.70	18.58
300	13.83	-58.68	-19.88	-9.97	79.49	0.91	45.47	9.34
500	13.12	-58.23	-19.06	-9.72	64.24	0.91	45.14	7.35
700	12.49	-51.44	-18.01	-9.38	44.13	0.90	45.18	6.42
900	12.26	-52.75	-16.69	-9.47	44.15	0.91	45.17	6.00
1000	12.14	-50.93	-16.15	-9.69	39.95	0.92	45.12	5.71
1200	12.15	-48.65	-14.46	-10.11	30.29	0.94	45.70	5.42
1400	12.00	-48.11	-13.41	-10.53	28.00	0.95	45.50	5.15
1600	11.90	-46.93	-12.60	-10.98	25.23	0.97	45.59	4.88
1800	11.79	-45.94	-12.03	-11.40	23.49	0.99	45.58	4.66
2000	11.72	-45.32	-11.74	-11.75	21.06	1.00	45.55	4.45
2200	11.66	-44.94	-11.72	-12.03	20.43	1.00	45.43	4.17
2400	11.64	-44.03	-12.00	-12.17	18.69	1.00	45.16	4.13
2600	11.63	-43.44	-12.59	-12.13	17.74	0.99	45.03	3.79
2800	11.63	-42.87	-13.58	-11.95	17.01	0.98	44.92	3.46
3000	11.64	-42.82	-14.95	-11.58	16.46	0.96	44.86	3.34
3200	11.63	-42.09	-16.94	-11.18	15.47	0.95	44.61	3.31
3400	11.62	-41.70	-19.58	-10.77	14.84	0.93	44.22	3.25
3600	11.59	-41.14	-23.35	-10.41	13.82	0.92	43.85	3.33
3800	11.55	-40.78	-27.36	-10.09	13.32	0.91	43.72	3.33
4000	11.48	-40.51	-26.45	-9.76	12.86	0.90	43.86	3.27
4200	11.41	-40.15	-23.09	-9.48	12.30	0.89	43.94	3.37
4400	11.31	-39.73	-20.84	-9.29	11.82	0.89	43.83	3.37
4600	11.24	-39.39	-19.57	-9.21	11.64	0.90	43.60	3.37
4800	11.21	-39.15	-19.06	-9.34	11.23	0.90	43.16	3.34
5000	11.21	-38.78	-19.25	-9.70	10.79	0.91	43.10	3.37
5200	11.23	-38.42	-19.91	-10.29	10.53	0.92	43.01	3.34
5400	11.27	-37.80	-21.06	-11.00	9.88	0.93	43.06	3.27
5600	11.30	-37.72	-22.53	-11.82	9.95	0.94	42.97	3.37
5800	11.31	-37.16	-24.04	-12.70	9.35	0.95	42.91	3.38
6000	11.31	-36.57	-26.39	-13.58	9.01	0.96	42.67	3.42
6200	11.31	-36.22	-26.87	-14.22	8.75	0.96	41.97	3.42
6400	11.28	-36.17	-25.77	-14.52	8.66	0.96	41.86	3.38
6600	11.24	-35.81	-24.43	-14.55	8.40	0.96	41.83	3.48
6800	11.19	-35.50	-23.55	-14.36	8.05	0.96	41.90	3.55
7000	11.13	-35.37	-23.59	-14.20	7.95	0.96	41.62	3.62

Typical Performance Data

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

TEST CONDITIONS: V_{DD} = +12 V, I_{DD} = 400 mA

FREQ	1dB Comp. Output			3dB Comp. Output			P_{SAT} Output		
	-45°C	+25°C	+85°C	-45°C	+25°C	+85°C	-45°C	+25°C	+85°C
(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)
10	29.42	28.66	28.30	31.88	31.48	31.36	33.63	33.41	33.37
100	30.21	29.70	29.81	31.92	31.69	31.77	32.85	32.74	32.64
300	30.66	30.45	30.67	31.95	31.88	31.94	32.75	32.65	32.54
500	30.69	30.55	30.71	32.02	32.00	32.02	32.78	32.68	32.55
700	30.69	30.47	30.56	32.05	31.98	31.95	32.73	32.59	32.40
900	30.75	30.48	30.50	32.06	31.94	31.87	32.68	32.51	32.28
1000	30.93	30.62	30.60	32.23	32.10	32.00	32.80	32.61	32.36
1200	30.91	30.59	30.56	32.19	32.04	31.94	32.78	32.60	32.35
1400	30.94	30.60	30.56	32.20	32.07	31.97	32.79	32.61	32.36
1600	31.17	30.78	30.70	32.44	32.28	32.17	33.01	32.79	32.56
1800	31.05	30.65	30.56	32.33	32.13	32.02	32.85	32.60	32.38
2000	31.07	30.65	30.51	32.29	32.06	31.92	32.91	32.64	32.39
2200	31.28	30.81	30.57	32.55	32.30	32.08	33.00	32.71	32.41
2400	31.28	30.80	30.52	32.55	32.28	32.04	33.12	32.82	32.49
2600	31.40	30.92	30.60	32.66	32.42	32.16	33.11	32.81	32.48
2800	31.45	30.96	30.64	32.66	32.42	32.19	33.19	32.90	32.59
3000	31.49	30.92	30.61	32.70	32.40	32.18	33.17	32.82	32.53
3200	31.71	31.04	30.68	32.90	32.53	32.29	33.33	32.93	32.62
3400	31.70	30.93	30.50	32.91	32.46	32.14	33.34	32.86	32.46
3600	31.81	31.03	30.54	33.08	32.66	32.28	33.47	33.00	32.54
3800	31.87	31.15	30.62	33.22	32.88	32.46	33.56	33.15	32.65
4000	32.18	31.49	30.86	33.57	33.31	32.82	33.81	33.45	32.91
4200	32.07	31.32	30.66	33.53	33.19	32.66	33.72	33.30	32.73
4400	31.97	31.11	30.49	33.32	32.86	32.38	33.57	33.07	32.53
4600	31.67	30.79	30.26	32.99	32.55	32.12	33.30	32.82	32.31
4800	31.46	30.67	30.22	32.86	32.46	32.06	33.24	32.77	32.29
5000	31.53	30.89	30.47	32.92	32.66	32.33	33.25	32.90	32.48
5200	31.74	31.24	30.76	33.12	32.95	32.63	33.40	33.14	32.72
5400	31.89	31.43	30.90	33.26	33.10	32.78	33.54	33.27	32.84
5600	31.86	31.35	30.83	33.22	33.00	32.65	33.53	33.20	32.74
5800	31.99	31.45	30.79	33.39	33.13	32.69	33.65	33.30	32.77
6000	32.07	31.47	30.77	33.47	33.20	32.70	33.69	33.34	32.77
6200	31.79	31.39	30.66	33.48	33.16	32.61	33.75	33.33	32.71
6400	32.05	31.60	30.80	33.76	33.42	32.81	33.94	33.49	32.85
6600	32.05	31.55	30.71	33.89	33.51	32.86	34.02	33.55	32.89
6800	31.98	31.50	30.63	33.95	33.48	32.79	34.04	33.50	32.82
7000	31.86	31.38	30.52	33.78	33.32	32.63	33.88	33.35	32.66

Typical Performance Data

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

TEST CONDITIONS: V_{DD} = +14 V, I_{DD} = 400 mA @ Temperature = +25°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output	3dB Comp. Output	Psat Output	Noise Figure	2nd Harmonic	3rd Harmonic
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)
10	17.59	-53.65	-23.87	-24.03	31.54	1.00	39.35	31.70	33.80	28.82	-59.98	-107.65
100	15.98	-64.02	-22.63	-12.02	117.65	0.94	45.16	32.10	33.30	30.53	-57.04	-108.98
300	14.26	-63.82	-20.09	-10.58	135.92	0.92	46.30	32.40	33.20	8.81	-58.20	-105.78
500	13.57	-58.61	-18.84	-10.30	79.96	0.92	45.48	32.40	33.20	6.89	-53.32	-95.91
700	12.92	-54.22	-17.67	-9.79	51.15	0.91	44.75	32.40	33.27	5.93	-47.72	-92.16
900	12.62	-51.58	-16.36	-9.95	38.99	0.92	44.76	32.80	33.69	5.48	-44.26	-87.55
1000	12.49	-52.05	-15.87	-10.10	41.84	0.92	44.49	32.90	33.79	5.11	-42.77	-82.79
1200	12.48	-49.52	-14.22	-10.47	31.17	0.94	44.81	33.00	34.11	4.78	-42.98	-76.20
1400	12.31	-49.34	-13.22	-10.68	31.00	0.96	44.53	33.20	34.22	4.64	-44.77	-89.56
1600	12.17	-48.25	-12.45	-11.07	27.75	0.97	44.24	33.00	33.99	4.47	-44.80	-99.10
1800	12.06	-46.41	-11.92	-11.70	22.81	0.99	44.09	33.00	33.94	4.02	-43.73	-87.05
2000	11.98	-46.95	-11.63	-11.83	24.41	1.00	44.01	33.60	34.01	3.80	-42.78	-80.18
2200	11.92	-45.92	-11.60	-12.04	21.86	1.00	44.20	33.42	33.80	3.46	-42.96	-84.66
2400	11.89	-45.74	-11.84	-12.55	21.76	1.01	44.25	33.64	33.98	3.26	-44.36	-83.96
2600	11.87	-44.90	-12.40	-12.22	19.85	0.99	44.29	33.85	34.23	3.14	-43.87	-77.03
2800	11.87	-44.00	-13.30	-12.02	18.02	0.98	44.10	33.91	34.27	3.02	-40.91	-74.91
3000	11.86	-43.30	-14.61	-11.70	16.78	0.97	44.05	33.88	34.22	2.94	-38.92	-76.89
3200	11.86	-43.67	-16.49	-11.17	17.56	0.95	44.09	33.88	34.08	2.87	-39.78	-73.92
3400	11.84	-43.38	-19.16	-10.69	17.04	0.93	43.89	34.02	34.27	2.80	-41.74	-72.56
3600	11.80	-42.49	-23.00	-9.99	15.32	0.90	43.70	34.02	34.28	2.74	-42.45	-76.74
3800	11.75	-42.44	-27.74	-9.81	15.31	0.90	43.69	34.15	34.41	2.82	-41.24	-77.72
4000	11.70	-41.87	-27.43	-9.41	14.29	0.89	43.49	34.42	34.61	2.77	-40.36	-75.01
4200	11.64	-40.73	-23.70	-9.29	12.54	0.88	43.56	34.34	34.52	2.80	-40.89	-76.48
4400	11.58	-40.45	-21.21	-9.32	12.20	0.89	43.43	34.33	34.46	2.93	-41.95	-77.35
4600	11.55	-40.55	-19.80	-9.54	12.42	0.90	43.23	34.40	34.46	2.79	-40.72	-72.63
4800	11.53	-40.18	-19.15	-9.54	11.92	0.90	42.94	34.2	34.22	2.81	-37.87	-75.38
5000	11.52	-39.57	-19.09	-10.27	11.33	0.92	42.40	34.10	34.16	2.88	-36.00	-77.31
5200	11.53	-39.16	-19.57	-10.54	10.86	0.92	42.38	34.26	34.20	2.78	-36.89	-75.24
5400	11.55	-39.34	-20.52	-11.34	11.26	0.93	42.25	34.10	34.10	2.82	-39.13	-78.19
5600	11.57	-39.12	-21.72	-11.98	11.12	0.94	42.41	34.14	34.15	2.79	-40.60	-82.40
5800	11.59	-38.33	-22.75	-12.54	10.21	0.95	42.58	34.3	34.3	2.84	-40.01	-82.31
6000	11.59	-38.01	-24.58	-13.63	10.00	0.96	42.58	34.22	34.22	2.82	-39.86	-81.18
6200	11.57	-37.54	-25.09	-13.73	9.52	0.96	42.45	34.35	34.31	2.84	-40.53	-85.07
6400	11.55	-37.20	-24.38	-14.31	9.21	0.96	42.21	34.59	34.49	2.88	-41.04	-81.60
6600	11.51	-36.86	-23.47	-14.35	8.90	0.96	41.84	34.44	34.34	2.94	-39.80	-80.26
6800	11.46	-36.98	-22.87	-14.41	9.08	0.97	41.38	34.4	34.3	2.96	-37.49	-86.74
7000	11.41	-36.52	-22.87	-13.99	8.62	0.96	41.11	34.39	34.30	3.03	-37.44	-86.09

Typical Performance Data

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

TEST CONDITIONS: V_{DD} = +16 V, I_{DD} = 400 mA @ Temperature = +25°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output	3dB Comp. Output	Psat Output	Noise Figure	2nd Harmonic	3rd Harmonic
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)
10	17.37	-44.33	-23.75	-25.20	11.08	1.00	40.04	32.50	34.60	28.86	-59.67	-107.14
100	15.83	-73.40	-22.63	-12.45	354.52	0.95	44.44	33.00	34.30	30.71	-57.02	-97.40
300	14.16	-58.40	-20.08	-11.04	74.31	0.93	46.12	33.40	34.10	8.90	-57.73	-103.69
500	13.53	-56.72	-18.84	-10.63	65.06	0.92	45.51	33.50	34.00	6.91	-53.68	-90.64
700	12.88	-53.87	-17.67	-10.10	49.72	0.92	45.11	33.50	34.22	5.98	-47.79	-83.49
900	12.57	-52.99	-16.34	-10.13	46.35	0.92	45.06	34.00	34.58	5.50	-44.25	-84.58
1000	12.42	-53.09	-15.84	-10.31	47.74	0.93	44.82	34.10	34.68	5.16	-43.00	-82.49
1200	12.42	-49.82	-14.17	-10.57	32.60	0.95	45.32	34.10	34.97	4.79	-43.24	-77.59
1400	12.22	-49.31	-13.20	-10.79	31.26	0.96	45.03	34.20	35.06	4.69	-44.83	-91.31
1600	12.08	-48.50	-12.43	-11.25	28.93	0.98	44.82	34.10	34.86	4.56	-44.96	-93.13
1800	11.96	-47.91	-11.90	-11.46	27.28	0.99	44.63	34.00	34.83	4.03	-44.10	-88.87
2000	11.86	-47.27	-11.63	-11.84	25.67	1.00	44.61	34.48	34.93	3.84	-42.70	-87.13
2200	11.80	-46.46	-11.62	-12.15	23.65	1.00	44.71	34.28	34.69	3.54	-42.94	-85.40
2400	11.76	-45.85	-11.86	-12.20	22.23	1.00	44.55	34.41	34.84	3.34	-44.21	-90.27
2600	11.74	-45.24	-12.39	-12.24	20.96	1.00	44.72	34.53	35.02	3.19	-43.58	-78.33
2800	11.73	-44.68	-13.26	-11.97	19.78	0.98	44.48	34.58	35.00	3.04	-40.82	-76.83
3000	11.72	-44.18	-14.55	-11.61	18.80	0.97	44.42	34.51	34.95	2.96	-38.73	-78.46
3200	11.72	-43.64	-16.39	-11.15	17.76	0.95	44.42	34.40	34.71	2.91	-39.46	-74.75
3400	11.71	-43.23	-18.97	-10.66	16.98	0.93	44.26	34.55	34.97	2.81	-41.46	-72.51
3600	11.68	-42.84	-22.61	-10.36	16.32	0.91	44.03	34.47	34.94	2.75	-42.08	-75.56
3800	11.64	-42.41	-27.08	-9.92	15.50	0.90	43.88	34.57	35.03	2.85	-41.11	-76.05
4000	11.59	-42.01	-27.15	-9.80	14.85	0.90	43.79	34.83	35.18	2.83	-40.20	-74.15
4200	11.54	-41.48	-23.50	-9.62	13.96	0.89	43.84	34.70	35.12	2.86	-40.78	-76.01
4400	11.49	-41.28	-21.02	-9.84	13.75	0.90	43.65	34.67	35.09	2.96	-41.72	-75.57
4600	11.45	-40.90	-19.58	-9.85	13.19	0.90	43.57	34.68	35.04	2.82	-40.51	-71.14
4800	11.43	-40.46	-18.88	-10.34	12.70	0.92	43.34	34.47	34.85	2.80	-37.65	-73.47
5000	11.41	-40.14	-18.83	-10.60	12.33	0.92	42.77	34.40	34.74	2.88	-35.84	-74.87
5200	11.40	-39.84	-19.31	-11.33	12.11	0.94	42.80	34.55	34.78	2.85	-36.70	-72.32
5400	11.41	-39.45	-20.42	-11.77	11.68	0.94	42.76	34.43	34.64	2.84	-38.91	-75.72
5600	11.41	-39.15	-21.85	-12.52	11.44	0.95	42.82	34.37	34.64	2.81	-40.41	-80.96
5800	11.41	-38.46	-23.07	-13.15	10.68	0.95	42.95	34.43	34.74	2.83	-39.88	-79.58
6000	11.39	-38.01	-24.87	-13.40	10.21	0.96	42.89	34.40	34.73	2.85	-39.59	-79.94
6200	11.38	-37.78	-24.94	-14.08	10.04	0.96	42.79	34.48	34.80	2.87	-40.26	-82.50
6400	11.34	-37.54	-23.97	-13.95	9.79	0.96	42.58	34.76	35.05	2.97	-40.89	-80.70
6600	11.28	-37.28	-23.04	-14.03	9.56	0.96	42.22	34.72	34.95	2.98	-39.58	-78.21
6800	11.22	-37.05	-22.50	-13.46	9.32	0.96	41.79	34.63	34.87	3.06	-37.34	-82.70
7000	11.13	-36.86	-22.74	-13.15	9.18	0.95	41.59	34.65	34.91	3.10	-37.18	-84.41

Typical Performance Data

Definitions:
Input Return Loss = -S11 (dB)
Gain(Power Gain) = S21 (dB)
Reverse Isolation = -S12 (dB)
Output Return Loss = -S22 (dB)

TEST CONDITIONS: V_{DD} = +12 V, I_{DD} = 400 mA @ Temperature = +25°C

Power	OIP2 (@1 GHz)	OIP2 (@3 GHz)	OIP2 (@6 GHz)
(dBm)	(dBm)	(dBm)	(dBm)
5	46.06	47.98	45.17
6	46.46	48.22	45.21
7	46.47	48.15	45.22
8	46.47	48.20	45.24
9	46.40	48.15	45.24
10	46.37	47.88	45.44
11	46.26	47.86	45.37
12	46.26	47.86	45.33
13	46.22	47.76	45.27
14	46.08	47.65	45.16
15	45.76	47.25	44.80
16	45.60	47.13	44.68
17	45.46	46.92	44.47
18	45.18	46.68	44.27
19	44.94	46.42	43.99
20	44.76	46.17	43.79
21	44.65	45.90	43.49
22	44.77	45.74	43.06
23	45.28	45.88	42.85
24	46.01	46.15	43.11
25	47.14	46.67	43.93
26	49.03	47.40	45.30
27	51.80	48.30	47.12

Typical Performance Data

TEST CONDITIONS: V_{DD} = +12 V, V_{G2} = +5 V, I_{DD} = 400 mA @ Temperature = +25°C

FREQ	P_{IN}	Gain
(MHz)	(dBm)	(dB)
1000	0.00	12.8
1000	1.00	12.8
1000	2.00	12.8
1000	3.00	12.8
1000	4.00	12.8
1000	5.00	12.8
1000	6.0	12.8
1000	7.0	12.8
1000	8.0	12.8
1000	9.0	12.8
1000	10.0	12.9
1000	12.0	12.9
1000	14.0	12.8
1000	15.0	12.7
1000	16.0	12.5
1000	18.0	11.9
1000	20.0	11.0
1000	22.0	9.7
1000	24.0	8.3
1000	25.0	7.6
4000	0.00	12.1
4000	1.00	12.1
4000	2.00	12.1
4000	3.00	12.1
4000	4.00	12.1
4000	5.00	12.1
4000	6.0	12.1
4000	7.0	12.1
4000	8.0	12.1
4000	9.0	12.1
4000	10.0	12.1
4000	12.0	12.1
4000	14.0	12.1
4000	15.0	12.1
4000	16.0	11.9
4000	18.0	11.5
4000	20.0	10.8
4000	22.0	9.7
4000	24.0	8.3
4000	25.0	7.6
8000	0.00	11.4
8000	1.00	11.4
8000	2.00	11.4
8000	3.00	11.4
8000	4.00	11.4
8000	5.00	11.4
8000	6.0	11.4
8000	7.0	11.4
8000	8.0	11.4
8000	9.0	11.4
8000	10.0	11.4
8000	12.0	11.4
8000	14.0	11.4
8000	15.0	11.4
8000	16.0	11.3
8000	18.0	10.9
8000	20.0	10.3
8000	22.0	9.5
8000	24.0	8.5
8000	25.0	7.9

Typical Performance Data

Definitions:
Input Return Loss = -S11 (dB)
Gain(Power Gain) = S21 (dB)
Reverse Isolation = -S12 (dB)
Output Return Loss = -S22 (dB)

TEST CONDITIONS: V_{DD} = +12 V, I_{DD} = 400 mA @ Temperature = +25°C

Power	P_{OUT} (@1 GHz)	P_{OUT} (@4 GHz)	I_{DD} (@1 GHz)	I_{DD} (@4 GHz)	P_{DISS} (@1 GHz)	P_{DISS} (@4 GHz)	PAE (@1 GHz)	PAE (@4 GHz)
(dBm)	(dBm)	(dBm)	mA	mA	(dBm)	(dBm)	(%)	(%)
0.00	12.85	12.07	392.27	396.15	4.78	4.78	0.38	0.32
0.50	13.34	12.56	394.53	394.85	4.78	4.78	0.43	0.36
1.00	13.85	13.06	390.66	393.89	4.78	4.78	0.48	0.40
1.50	14.35	13.56	393.24	394.53	4.77	4.78	0.54	0.45
2.00	14.84	14.06	394.85	395.50	4.77	4.78	0.60	0.50
2.50	15.33	14.56	392.92	394.53	4.77	4.77	0.67	0.56
3.00	15.84	15.06	392.59	393.56	4.76	4.77	0.76	0.63
3.50	16.34	15.56	390.66	393.24	4.76	4.77	0.85	0.71
4.00	16.84	16.06	390.01	393.89	4.75	4.76	0.95	0.80
4.50	17.34	16.56	390.66	393.24	4.75	4.76	1.07	0.89
5.00	17.84	17.06	389.69	391.63	4.74	4.75	1.20	1.00
5.50	18.35	17.56	389.04	393.24	4.74	4.75	1.35	1.13
6.00	18.85	18.07	386.46	391.30	4.73	4.74	1.51	1.26
6.50	19.35	18.56	387.43	390.66	4.72	4.73	1.70	1.42
7.00	19.85	19.06	388.07	390.66	4.71	4.72	1.91	1.59
7.50	20.36	19.56	388.07	391.30	4.70	4.71	2.14	1.79
8.00	20.86	20.06	385.17	390.98	4.68	4.70	2.41	2.00
8.50	21.36	20.56	385.17	388.40	4.67	4.69	2.70	2.25
9.00	21.87	21.06	385.49	390.66	4.65	4.68	3.04	2.52
9.50	22.37	21.56	385.17	390.98	4.64	4.66	3.41	2.83
10.00	22.87	22.06	384.85	389.37	4.62	4.65	3.83	3.18
10.50	23.38	22.56	382.59	389.04	4.59	4.63	4.30	3.56
11.00	23.88	23.06	385.17	388.40	4.57	4.61	4.83	4.00
11.50	24.38	23.56	384.85	389.37	4.54	4.58	5.42	4.49
12.00	24.88	24.06	381.62	389.69	4.51	4.56	6.07	5.03
12.50	25.37	24.56	382.91	388.72	4.47	4.53	6.81	5.64
13.00	25.87	25.05	381.29	389.37	4.43	4.50	7.63	6.32
13.50	26.35	25.54	381.62	389.37	4.39	4.46	8.53	7.07
14.00	26.83	26.02	381.29	390.33	4.34	4.42	9.52	7.90
14.50	27.29	26.50	381.94	390.98	4.29	4.38	10.58	8.81
15.00	27.74	26.97	380.65	390.98	4.24	4.33	11.71	9.81
15.50	28.16	27.42	383.23	392.27	4.18	4.28	12.90	10.88
16.00	28.56	27.86	383.23	394.53	4.12	4.22	14.14	12.01
16.50	28.94	28.27	385.49	397.76	4.06	4.17	15.39	13.20
17.00	29.29	28.67	386.78	400.02	4.00	4.11	16.66	14.44
17.50	29.63	29.06	388.72	407.12	3.94	4.04	17.95	15.74
18.00	29.94	29.43	391.30	412.94	3.88	3.98	19.24	17.09
18.50	30.23	29.78	395.18	423.59	3.82	3.91	20.50	18.47
19.00	30.50	30.10	397.11	430.37	3.76	3.85	21.71	19.83
19.50	30.74	30.40	404.54	435.86	3.70	3.79	22.86	21.14
20.00	30.96	30.67	408.42	444.58	3.65	3.72	23.94	22.40
20.50	31.17	30.93	413.26	456.85	3.60	3.67	24.94	23.60
21.00	31.35	31.16	421.33	465.24	3.56	3.61	25.86	24.73
21.50	31.52	31.37	426.82	472.67	3.52	3.56	26.68	25.78
22.00	31.68	31.56	431.34	481.06	3.48	3.52	27.42	26.72
22.50	31.82	31.74	437.47	487.84	3.45	3.48	28.08	27.56
23.00	31.96	31.90	442.32	496.24	3.42	3.44	28.66	28.28
23.50	32.08	32.05	450.71	504.95	3.40	3.41	29.14	28.89
24.00	32.20	32.18	459.75	514.64	3.38	3.39	29.53	29.39
24.50	32.30	32.30	467.82	524.97	3.37	3.37	29.79	29.77
25.00	32.38	32.40	470.41	527.23	3.37	3.36	29.75	29.93

Typical Performance Data

TEST CONDITIONS: V_{DD} = +12 V, I_{DD} = 300 mA, 400 mA, 500 mA @ Temperature = +25°C

FREQ	Gain @ 300 mA	Gain @ 400 mA	Gain @ 500 mA	1dB Comp. Output @ 300 mA	1dB Comp. Output @ 400 mA	1dB Comp. Output @ 500 mA	Psat Output @ 300 mA	Psat Output @ 400 mA	Psat Output @ 500 mA	Noise Figure @ 300 mA	Noise Figure @ 400 mA	Noise Figure @ 500 mA
(MHz)	(dB)	(dB)	(dB)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)	(dB)	(dB)
10	17.4	17.9	18.1	27.24	28.13	28.62	32.11	32.35	32.55	28.64	28.71	28.90
100	15.9	16.3	16.6	27.85	28.71	29.15	32.24	32.36	32.48	30.81	30.77	30.42
300	14.1	14.5	14.8	28.29	29.29	29.90	31.52	31.65	31.78	8.73	8.79	8.85
500	13.4	13.8	14.1	28.74	29.62	30.05	30.78	30.92	31.02	6.79	6.81	6.95
700	12.8	13.2	13.5	28.92	29.94	30.45	31.75	31.90	31.98	5.84	5.91	6.02
900	12.5	12.9	13.2	29.20	30.31	30.81	32.28	32.45	32.53	5.37	5.44	5.55
1000	12.4	12.8	13.0	29.41	30.54	31.03	32.84	33.01	33.09	5.00	5.10	5.23
1200	12.4	12.8	13.0	29.48	30.63	31.12	32.74	32.92	33.00	4.65	4.73	4.84
1400	12.2	12.6	12.8	29.54	30.62	31.09	32.80	32.98	33.05	4.54	4.60	4.75
1600	12.0	12.5	12.7	29.52	30.53	30.98	32.35	32.53	32.59	4.34	4.43	4.54
1800	11.9	12.3	12.6	29.46	30.43	30.87	32.16	32.32	32.39	3.91	3.96	4.12
2000	11.8	12.3	12.5	29.44	30.41	30.83	32.13	32.31	32.39	3.65	3.76	3.95
2200	11.8	12.2	12.4	29.41	30.33	30.73	31.99	32.17	32.24	3.35	3.47	3.61
2400	11.8	12.2	12.4	29.56	30.46	30.86	32.11	32.29	32.37	3.15	3.27	3.41
2600	11.7	12.2	12.4	29.69	30.65	31.07	32.25	32.46	32.55	3.01	3.12	3.28
2800	11.8	12.2	12.4	29.80	30.79	31.18	32.58	32.77	32.86	2.88	2.97	3.16
3000	11.8	12.2	12.4	29.89	30.93	31.33	32.65	32.86	32.96	2.78	2.88	3.09
3200	11.8	12.2	12.4	29.90	30.97	31.37	32.67	32.89	32.99	2.68	2.78	2.98
3400	11.7	12.1	12.4	29.77	30.89	31.27	32.64	32.85	32.93	2.62	2.75	2.92
3600	11.7	12.1	12.4	29.87	31.04	31.44	32.89	33.12	33.19	2.58	2.74	2.89
3800	11.7	12.1	12.3	29.80	30.98	31.37	32.87	33.09	33.14	2.66	2.82	2.99
4000	11.6	12.0	12.3	29.82	31.06	31.43	32.98	33.20	33.26	2.68	2.75	2.95
4200	11.6	12.0	12.2	29.79	31.04	31.40	32.97	33.18	33.22	2.71	2.79	3.03
4400	11.5	11.9	12.2	29.79	30.99	31.37	32.92	33.10	33.15	2.78	2.91	3.06
4600	11.5	11.9	12.2	29.80	30.99	31.40	33.03	33.23	33.28	2.65	2.78	2.90
4800	11.5	11.9	12.1	29.75	30.97	31.37	32.90	33.10	33.15	2.62	2.76	2.95
5000	11.5	11.9	12.1	29.72	31.00	31.41	32.87	33.09	33.15	2.71	2.84	3.02
5200	11.5	11.9	12.1	29.70	30.98	31.39	32.80	33.03	33.10	2.66	2.79	2.90
5400	11.5	11.9	12.2	29.80	31.11	31.53	32.89	33.13	33.22	2.64	2.78	2.92
5600	11.5	11.9	12.2	29.83	31.13	31.56	32.87	33.13	33.20	2.60	2.71	2.93
5800	11.5	11.9	12.2	29.79	31.13	31.56	33.02	33.27	33.35	2.62	2.80	2.95
6000	11.5	11.9	12.2	29.72	31.08	31.56	33.00	33.27	33.36	2.67	2.81	2.98
6200	11.5	11.9	12.2	29.66	31.05	31.54	33.03	33.29	33.38	2.66	2.81	3.00
6400	11.4	11.9	12.1	29.59	31.03	31.53	32.90	33.18	33.27	2.73	2.82	3.03
6600	11.4	11.8	12.1	29.64	31.09	31.59	33.23	33.49	33.57	2.79	2.88	3.06
6800	11.3	11.8	12.0	29.52	31.04	31.52	33.14	33.36	33.42	2.83	2.96	3.07
7000	11.2	11.7	12.0	29.43	30.99	31.47	32.98	33.20	33.25	2.87	2.96	3.15
7200	11.2	11.6	11.9	29.35	30.94	31.42	32.97	33.17	33.22	2.96	3.06	3.22
7400	11.1	11.5	11.8	29.32	30.89	31.37	32.90	33.09	33.15	3.00	3.08	3.30
7600	11.0	11.4	11.7	29.18	30.86	31.33	32.99	33.17	33.23	3.04	3.18	3.32
7800	10.9	11.4	11.7	29.12	30.78	31.26	32.84	33.03	33.09	3.12	3.23	3.38
8000	10.8	11.3	11.6	29.04	30.64	31.13	32.81	32.99	33.05	3.17	3.27	3.46

Typical Performance Data

TEST CONDITIONS: V_{DD} = +12 V, V_{G2} = +5 V, I_{DD} = 400 mA @ Temperature = +25°C

FREQ	P_{OUT}	2nd Harmonic	FREQ	P_{OUT}	3rd Harmonic
(MHz)	(dBm)	(dB)	(GHz)	(dBm)	(dB)
2000	5.0	-48.4	2.00	5.0	-101.2
2000	6.0	-46.9	2.00	6.0	-87.7
2000	7.0	-45.6	2.00	7.0	-99.4
2000	8.0	-44.9	2.00	8.0	-86.1
2000	9.0	-44.0	2.00	9.0	-87.0
2000	10.0	-42.9	2.00	10.0	-87.3
2000	12.0	-40.8	2.00	12.0	-86.1
2000	14.0	-41.0	2.00	14.0	-81.4
2000	15.0	-38.7	2.00	15.0	-78.9
2000	16.0	-37.7	2.00	16.0	-78.0
2000	18.0	-36.6	2.00	18.0	-74.4
2000	20.0	-34.4	2.00	20.0	-68.9
2000	22.0	-32.1	2.00	22.0	-62.5
2000	24.0	-29.6	2.00	24.0	-57.0
4000	5.00	-46.3	4.00	5.00	-86.3
4000	6.0	-44.6	4.00	6.0	-82.4
4000	7.0	-44.0	4.00	7.0	-81.2
4000	8.0	-43.0	4.00	8.0	-78.8
4000	9.0	-42.0	4.00	9.0	-77.3
4000	10.0	-40.9	4.00	10.0	-74.7
4000	12.0	-38.9	4.00	12.0	-68.6
4000	14.0	-39.1	4.00	14.0	-65.6
4000	15.0	-36.8	4.00	15.0	-63.2
4000	16.0	-35.6	4.00	16.0	-61.3
4000	18.0	-34.6	4.00	18.0	-56.8
4000	20.0	-32.5	4.00	20.0	-52.6
4000	22.0	-30.2	4.00	22.0	-47.9
4000	24.0	-27.7	4.00	24.0	-42.4
6000	5.0	-45.6	6.00	5.0	-88.4
6000	6.0	-44.4	6.00	6.0	-87.8
6000	7.0	-43.4	6.00	7.0	-84.8
6000	8.0	-42.4	6.00	8.0	-84.1
6000	9.0	-41.5	6.00	9.0	-83.6
6000	10.0	-40.4	6.00	10.0	-80.3
6000	12.0	-38.4	6.00	12.0	-78.5
6000	14.0	-38.6	6.00	14.0	-72.9
6000	15.0	-36.4	6.00	15.0	-71.4
6000	16.0	-35.5	6.00	16.0	-69.4
6000	18.0	-34.4	6.00	18.0	-65.1
6000	20.0	-32.3	6.00	20.0	-61.2
6000	22.0	-30.1	6.00	22.0	-55.2
6000	24.0	-27.7	6.00	24.0	-49.8