

*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<sub>DD</sub> = +8 V, I<sub>DD</sub> = 400 mA @ Temperature = +25°C

FREQ (GHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		IP-3 Output (dBm)	1dB Comp. Output (dBm)	3dB Comp. Output (dBm)	P <sub>sat</sub> Output (dBm)	Noise Figure (dB)	2nd Harmonic (dBc)	3rd Harmonic (dBc)
					K	Measure							
0.01	18.6	-81.76	-22.75	-22.39	748.88	1.00	42.99	25.16	28.35	29.73	-	-	-
0.1	16.6	-70.36	-21.28	-9.00	209.67	0.88	41.30	25.10	27.79	28.84	-	-46.67	-73.11
0.3	14.6	-60.77	-19.37	-8.28	84.66	0.86	42.15	26.75	28.29	29.79	8.71	-41.52	-74.53
0.5	13.9	-55.36	-18.16	-8.09	48.67	0.86	43.86	26.96	28.32	29.80	6.65	-42.11	-70.24
1.0	13.1	-50.07	-15.34	-8.51	29.30	0.88	42.55	27.22	28.41	29.78	5.05	-35.28	-73.22
1.2	13.2	-48.04	-14.01	-8.96	23.17	0.90	42.36	27.14	28.35	29.77	4.69	-38.97	-67.14
1.4	13.1	-47.18	-13.21	-9.45	21.34	0.93	42.26	27.29	28.45	29.86	4.39	-39.54	-68.42
1.6	13.0	-46.25	-12.48	-10.08	19.50	0.95	42.28	27.35	28.52	29.90	4.16	-39.17	-70.03
1.8	13.0	-45.44	-12.12	-10.77	17.97	0.97	42.41	27.23	28.44	29.84	3.95	-37.85	-71.07
2.0	13.0	-44.66	-11.88	-11.48	16.64	0.99	42.39	27.21	28.42	29.82	3.65	-35.65	-69.68
2.2	12.9	-43.97	-11.96	-12.08	15.56	1.00	42.42	27.49	28.69	30.05	3.45	-37.46	-71.99
2.4	13.0	-43.29	-12.26	-12.62	14.55	1.00	42.48	27.00	28.23	29.71	3.24	-39.37	-73.48
2.6	13.0	-42.69	-12.93	-13.00	13.70	1.00	42.55	27.69	28.79	30.18	3.06	-38.34	-72.48
2.8	13.0	-42.09	-13.90	-13.03	12.85	0.99	42.61	27.42	28.54	29.96	2.87	-38.32	-73.84
3.0	13.0	-41.54	-15.39	-12.69	12.13	0.97	42.60	27.64	28.71	30.05	2.73	-39.25	-74.17
3.2	13.0	-41.04	-17.48	-12.22	11.49	0.96	42.54	27.81	28.83	30.17	2.68	-41.51	-72.88
3.4	13.0	-40.59	-20.71	-11.68	10.92	0.94	42.49	27.86	28.86	30.18	2.62	-41.52	-73.17
3.6	13.0	-40.15	-25.82	-11.12	10.40	0.92	42.34	27.97	28.94	30.22	2.62	-41.73	-73.12
3.8	13.0	-39.70	-34.06	-10.80	9.90	0.92	42.23	28.04	28.99	30.48	2.64	-41.49	-73.56
4.0	12.9	-39.35	-32.17	-10.50	9.46	0.91	42.09	28.05	29.07	30.49	2.65	-39.94	-72.03
4.2	12.9	-39.01	-25.56	-10.26	9.10	0.90	42.18	28.49	29.88	30.79	2.61	-40.69	-72.35
4.4	12.8	-38.69	-22.17	-10.23	8.76	0.91	41.95	28.37	29.76	30.73	2.59	-40.75	-71.13
4.6	12.8	-38.30	-20.66	-10.40	8.43	0.91	41.75	28.65	30.04	31.08	2.63	-40.91	-70.41
4.8	12.8	-37.95	-19.83	-10.74	8.12	0.92	41.61	28.63	29.95	31.05	2.68	-40.06	-70.53
5.0	12.8	-37.55	-19.87	-11.08	7.81	0.93	41.46	28.63	29.91	31.06	2.73	-41.10	-70.91
5.2	12.8	-37.15	-20.34	-11.50	7.53	0.93	41.32	28.74	30.03	31.20	2.70	-41.19	-71.85
5.4	12.8	-36.83	-21.29	-12.09	7.32	0.94	41.22	28.71	30.00	31.17	2.66	-41.44	-73.92
5.6	12.9	-36.54	-22.28	-12.61	7.14	0.95	41.05	28.71	30.03	31.21	2.69	-42.00	-75.29
5.8	12.9	-36.12	-22.75	-13.16	6.85	0.95	40.88	28.67	29.99	31.16	2.67	-41.85	-76.10
6.0	12.9	-35.70	-23.30	-13.82	6.59	0.96	40.84	28.70	30.03	31.18	2.64	-41.29	-76.76
6.2	12.83	-35.45	-23.35	-14.00	6.42	0.96	40.74	28.61	29.99	31.11	2.60	-41.16	-75.62
6.4	12.79	-35.20	-23.16	-14.03	6.26	0.96	40.57	28.52	29.96	31.07	2.61	-41.51	-73.57
6.6	12.76	-34.93	-23.36	-14.03	6.10	0.96	40.44	28.59	30.05	31.10	2.65	-41.51	-72.28
6.8	12.70	-34.72	-23.90	-13.68	5.97	0.96	40.31	28.48	30.02	31.04	2.69	-40.57	-73.41
7.0	12.63	-34.52	-25.44	-13.24	5.87	0.95	40.06	28.19	29.74	30.84	2.71	-40.01	-74.14
7.2	12.57	-34.36	-26.95	-12.88	5.77	0.94	39.95	28.25	29.80	30.84	2.80	-40.62	-74.81
7.4	12.48	-34.17	-26.49	-12.49	5.69	0.94	39.77	28.05	29.66	30.69	2.85	-40.55	-74.40
7.6	12.39	-34.04	-24.51	-12.08	5.63	0.93	39.55	27.97	29.58	30.61	2.86	-40.11	-75.60
7.8	12.32	-33.90	-21.74	-11.98	5.56	0.93	39.40	28.15	29.69	30.70	2.92	-40.51	-74.78
8.0	12.24	-33.75	-19.56	-12.06	5.48	0.94	39.06	27.88	29.47	30.46	2.98	-42.39	-75.33
8.2	12.18	-33.56	-18.20	-12.13	5.39	0.94	38.80	27.69	29.28	30.34	3.03	-43.36	-75.70
8.4	12.17	-33.44	-17.45	-12.33	5.30	0.95	38.64	27.73	29.23	30.39	3.13	-44.32	-75.56
8.6	12.16	-33.23	-17.43	-12.62	5.20	0.95	38.42	27.56	29.08	30.20	3.17	-44.85	-74.89
8.8	12.13	-33.01	-18.16	-12.76	5.10	0.96	38.20	27.26	28.75	29.96	3.19	-44.48	-73.28
9.0	12.09	-32.77	-19.92	-12.79	5.04	0.95	38.00	27.37	28.86	30.03	3.22	-44.30	-71.94
9.2	12.01	-32.64	-23.67	-12.69	5.01	0.95	37.72	27.15	28.62	29.86	3.34	-44.46	-69.59
9.4	11.89	-32.53	-26.42	-12.50	5.01	0.94	37.47	26.87	28.46	29.65	3.42	-45.04	-68.86
9.6	11.70	-32.46	-25.99	-12.18	5.07	0.93	37.30	26.96	28.60	29.75	3.58	-42.36	-68.81
9.8	11.48	-32.39	-26.64	-12.05	5.15	0.93	37.01	26.67	28.46	29.57	3.70	-40.54	-67.37
10.0	11.22	-32.43	-21.62	-12.23	5.30	0.94	36.88	26.78	28.66	29.63	3.90	-41.18	-64.58

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**Definitions:**

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

TEST CONDITIONS: V<sub>DD</sub> = +6 V, I<sub>DD</sub> = 400 mA @ Temperature = +25°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output	1dB Comp. Output	3dB Comp. Output	P <sub>sat</sub> Output	Noise Figure	2nd Harmonic	3rd Harmonic
					K	Measure							
(GHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dBm)	(dBm)	(dB)	(dBc)	(dBc)
0.01	18.89	-84.04	-22.80	-20.35	902.79	1.00	34.67	22.84	25.96	27.64	-	-	-
0.10	16.64	-69.05	-21.29	-7.46	169.12	0.83	33.81	22.49	25.30	26.72	-	-48.94	-68.80
0.30	14.47	-59.74	-19.38	-6.90	71.59	0.80	34.22	23.74	25.65	27.41	8.71	-44.51	-70.87
0.50	13.79	-54.40	-18.23	-6.83	41.65	0.80	35.85	24.05	25.76	27.47	6.69	-41.73	-66.91
1.00	13.09	-48.93	-15.35	-7.42	24.57	0.84	39.08	24.54	26.06	27.66	5.01	-35.70	-71.46
1.20	13.22	-47.03	-14.05	-7.89	19.62	0.87	40.58	24.58	26.15	27.76	4.66	-38.84	-68.55
1.40	13.18	-46.03	-13.21	-8.41	17.83	0.89	40.71	24.58	26.13	27.76	4.34	-39.49	-68.87
1.60	13.16	-45.04	-12.51	-9.05	16.15	0.92	40.86	24.65	26.19	27.81	4.08	-40.55	-69.91
1.80	13.16	-44.14	-12.13	-9.75	14.79	0.94	40.71	24.58	26.15	27.82	3.88	-35.48	-71.56
2.00	13.18	-43.31	-11.88	-10.48	13.63	0.97	42.43	24.74	26.32	27.95	3.61	-35.25	-70.30
2.20	13.18	-42.57	-11.96	-11.15	12.70	0.98	42.55	24.65	26.19	27.89	3.37	-35.55	-77.60
2.40	13.22	-41.88	-12.30	-11.81	11.85	0.99	42.23	24.32	25.94	27.72	3.22	-37.05	-73.80
2.60	13.26	-41.23	-13.01	-12.36	11.12	0.99	42.12	24.49	26.09	27.85	3.00	-41.55	-72.10
2.80	13.30	-40.60	-13.99	-12.56	10.45	0.98	42.29	24.91	26.43	28.13	2.87	-36.80	-72.70
3.00	13.32	-40.08	-15.52	-12.48	9.88	0.97	42.36	25.00	26.51	28.15	2.73	-36.80	-73.50
3.20	13.33	-39.55	-17.63	-12.23	9.37	0.96	42.51	25.10	26.59	28.20	2.72	-39.25	-73.11
3.40	13.32	-39.09	-20.91	-11.82	8.91	0.94	42.45	25.51	26.91	28.44	2.66	-39.35	-72.40
3.60	13.30	-38.65	-26.21	-11.37	8.50	0.93	42.48	25.52	26.92	28.41	2.64	-39.94	-72.18
3.80	13.27	-38.21	-34.54	-11.13	8.10	0.92	42.28	25.25	26.66	28.37	2.69	-38.54	-71.75
4.00	13.25	-37.82	-32.01	-10.87	7.75	0.91	42.10	25.34	26.88	28.41	2.71	-38.62	-70.24
4.20	13.19	-37.51	-25.51	-10.65	7.46	0.91	40.81	26.10	27.63	28.70	2.65	-39.96	-70.46
4.40	13.14	-37.16	-22.21	-10.66	7.18	0.91	40.60	26.30	27.70	28.70	2.65	-39.83	-70.29
4.60	13.12	-36.80	-20.72	-10.83	6.92	0.92	40.42	26.50	27.77	28.90	2.70	-39.90	-69.92
4.80	13.12	-36.42	-19.97	-11.18	6.67	0.93	40.26	26.30	27.8	28.90	2.70	-39.94	-70.20
5.00	13.11	-36.06	-20.10	-11.55	6.43	0.93	40.24	26.30	27.73	28.90	2.71	-40.31	-70.43
5.20	13.12	-35.66	-20.65	-11.96	6.21	0.94	40.19	26.30	27.77	28.90	2.78	-40.89	-71.44
5.40	13.13	-35.35	-21.69	-12.54	6.03	0.94	40.12	26.40	27.80	29.00	2.70	-40.87	-72.79
5.60	13.14	-35.12	-22.70	-12.97	5.89	0.95	40.10	26.20	27.70	28.90	2.69	-40.57	-75.37
5.80	13.13	-34.72	-23.11	-13.49	5.68	0.95	39.98	26.30	27.8	29.0	2.68	-41.07	-76.33
6.00	13.11	-34.34	-23.55	-14.09	5.48	0.96	39.98	26.60	27.90	29.20	2.67	-40.05	-76.28
6.20	13.08	-34.10	-23.47	-14.22	5.35	0.96	39.96	26.30	27.77	29.00	2.59	-40.55	-75.85
6.40	13.04	-33.82	-23.15	-14.21	5.23	0.96	39.79	26.20	27.80	29.10	2.60	-41.06	-73.35
6.60	13.00	-33.59	-23.29	-14.27	5.11	0.96	39.73	26.30	27.80	29.00	2.64	-41.23	-71.12
6.80	12.94	-33.39	-23.76	-14.04	5.02	0.96	39.76	26.00	27.60	28.90	2.70	-39.18	-71.00
7.00	12.87	-33.23	-25.20	-13.64	4.94	0.95	39.17	25.90	27.43	28.90	2.73	-39.33	-70.81
7.20	12.80	-33.03	-26.58	-13.41	4.87	0.95	39.11	25.80	27.47	28.70	2.78	-38.91	-70.54
7.40	12.72	-32.88	-26.22	-13.08	4.82	0.94	38.98	25.80	27.37	28.70	2.85	-38.85	-71.09
7.60	12.63	-32.74	-24.41	-12.70	4.77	0.94	38.70	25.70	27.23	28.70	2.89	-38.80	-71.47
7.80	12.54	-32.61	-21.81	-12.66	4.73	0.94	38.70	25.50	27.20	28.50	2.92	-38.69	-71.36
8.00	12.46	-32.46	-19.68	-12.75	4.68	0.94	38.14	25.40	26.97	28.40	2.97	-39.33	-71.27
8.20	12.39	-32.34	-18.36	-12.79	4.62	0.95	37.93	25.20	26.83	28.40	3.06	-43.36	-71.79
8.40	12.36	-32.17	-17.62	-12.94	4.56	0.95	37.89	25.20	26.77	28.30	3.13	-44.90	-71.83
8.60	12.32	-32.04	-17.65	-13.09	4.49	0.96	37.69	25.00	26.53	28.00	3.19	-44.91	-71.48
8.80	12.27	-31.83	-18.43	-13.10	4.43	0.96	37.50	24.90	26.40	28.10	3.25	-44.08	-72.68
9.00	12.20	-31.67	-20.29	-13.01	4.40	0.95	37.11	24.80	26.30	28.00	3.26	-43.95	-73.97
9.20	12.10	-31.56	-24.23	-12.84	4.40	0.94	36.88	24.60	25.90	27.60	3.36	-45.17	-73.58
9.40	11.96	-31.49	-26.89	-12.67	4.43	0.94	36.61	24.20	25.87	27.90	3.48	-44.38	-72.19
9.60	11.75	-31.46	-26.30	-12.41	4.51	0.93	36.38	24.30	26.07	27.70	3.58	-40.57	-71.45
9.80	11.52	-31.44	-26.54	-12.38	4.61	0.94	36.10	24.20	25.73	27.80	3.77	-37.88	-71.39
10.00	11.26	-31.48	-21.52	-12.74	4.78	0.95	36.12	24.00	25.77	27.50	3.94	-38.53	-71.74

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TEST CONDITIONS: V<sub>DD</sub> = +10 V, I<sub>DD</sub> = 400 mA @ Temperature = +25°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output	1dB Comp. Output	3dB Comp. Output	P <sub>sat</sub> Output	Noise Figure	2nd Harmonic	3rd Harmonic
					K	Measure							
(GHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)
0.01	18.25	-81.22	-22.70	-23.40	693.35	1.00	44.79	27.05	29.97	31.30	-	-	-
0.10	16.48	-71.15	-21.27	-10.08	241.25	0.91	44.99	27.63	29.80	30.67	-	-46.67	-73.11
0.30	14.60	-61.36	-19.36	-9.26	94.29	0.89	45.05	28.65	29.89	31.21	8.75	-41.52	-74.53
0.50	13.92	-55.99	-18.15	-8.99	54.29	0.89	45.48	28.86	30.01	31.20	6.70	-42.11	-70.24
1.00	12.98	-50.75	-15.26	-9.26	33.02	0.91	44.29	29.22	30.28	31.23	5.11	-35.28	-73.22
1.20	13.01	-48.69	-14.00	-9.68	25.86	0.93	44.18	29.21	30.30	31.29	4.79	-38.97	-67.14
1.40	12.89	-47.87	-13.20	-10.11	24.03	0.94	43.88	29.23	30.32	31.26	4.48	-39.54	-68.42
1.60	12.80	-47.04	-12.47	-10.69	22.13	0.96	43.79	29.29	30.39	31.27	4.23	-39.17	-70.03
1.80	12.73	-46.28	-12.12	-11.32	20.52	0.98	43.71	29.27	30.38	31.25	4.00	-37.85	-71.07
2.00	12.69	-45.51	-11.84	-11.96	19.06	1.00	43.71	29.39	30.55	31.32	3.76	-35.65	-69.68
2.20	12.65	-44.82	-11.95	-12.45	17.86	1.00	43.64	29.32	30.43	31.25	3.52	-37.46	-71.99
2.40	12.66	-44.22	-12.25	-12.85	16.76	1.00	43.62	29.06	30.18	31.08	3.34	-39.37	-73.48
2.60	12.67	-43.63	-12.92	-13.11	15.82	1.00	43.69	29.20	30.32	31.18	3.10	-38.34	-72.48
2.80	12.69	-43.03	-13.89	-13.02	14.84	0.99	43.73	29.57	30.69	31.52	2.92	-38.32	-73.84
3.00	12.70	-42.48	-15.37	-12.59	14.00	0.97	43.83	29.72	30.82	31.54	2.79	-39.25	-74.17
3.20	12.71	-41.98	-17.43	-12.09	13.26	0.96	43.81	29.74	30.81	31.57	2.76	-41.51	-72.88
3.40	12.70	-41.53	-20.54	-11.52	12.59	0.94	43.74	30.08	31.09	31.78	2.67	-41.52	-73.17
3.60	12.68	-41.12	-25.64	-10.96	11.98	0.92	43.61	30.00	31.02	31.74	2.66	-41.73	-73.12
3.80	12.65	-40.64	-33.69	-10.64	11.40	0.91	43.50	29.83	30.85	31.80	2.69	-41.49	-73.56
4.00	12.63	-40.28	-32.06	-10.34	10.88	0.91	43.33	29.87	31.02	31.86	2.66	-39.94	-72.03
4.20	12.57	-39.94	-25.57	-10.10	10.47	0.90	42.12	30.00	31.70	32.40	2.62	-40.69	-72.35
4.40	12.52	-39.63	-22.18	-10.05	10.07	0.90	41.95	30.20	31.77	32.50	2.62	-40.75	-71.13
4.60	12.50	-39.23	-20.60	-10.21	9.68	0.91	41.61	30.30	31.87	32.70	2.66	-40.91	-70.41
4.80	12.49	-38.85	-19.76	-10.54	9.32	0.92	41.38	30.20	31.73	32.50	2.72	-40.06	-70.53
5.00	12.49	-38.45	-19.77	-10.87	8.97	0.93	41.18	30.10	31.57	32.40	2.72	-41.10	-70.91
5.20	12.50	-38.08	-20.22	-11.32	8.65	0.93	41.01	30.20	31.63	32.50	2.69	-41.19	-71.85
5.40	12.52	-37.76	-21.16	-11.91	8.40	0.94	40.72	30.30	31.70	32.60	2.69	-41.44	-73.92
5.60	12.54	-37.46	-22.08	-12.47	8.19	0.95	40.52	30.10	31.53	32.40	2.69	-42.00	-75.29
5.80	12.54	-37.00	-22.57	-13.05	7.84	0.95	41.95	30.30	31.73	32.60	2.65	-41.85	-76.10
6.00	12.54	-36.62	-23.15	-13.72	7.53	0.96	41.96	30.60	31.90	32.80	2.69	-41.29	-76.76
6.20	12.52	-36.30	-23.29	-13.94	7.33	0.96	41.80	30.30	31.80	32.60	2.62	-41.16	-75.62
6.40	12.48	-36.04	-23.15	-13.90	7.13	0.96	41.54	30.30	31.93	32.70	2.60	-41.51	-73.57
6.60	12.45	-35.76	-23.44	-13.93	6.93	0.96	41.39	30.40	32.00	32.70	2.64	-41.51	-72.28
6.80	12.39	-35.52	-24.11	-13.54	6.78	0.95	41.28	30.10	31.80	32.60	2.67	-40.57	-73.41
7.00	12.32	-35.35	-25.74	-13.02	6.65	0.95	40.96	30.00	31.60	32.50	2.71	-40.01	-74.14
7.20	12.25	-35.11	-27.36	-12.61	6.52	0.94	40.89	30.00	31.73	32.40	2.75	-40.62	-74.81
7.40	12.16	-34.99	-26.71	-12.17	6.43	0.94	40.67	30.10	31.73	32.40	2.87	-40.55	-74.40
7.60	12.07	-34.86	-24.54	-11.75	6.36	0.93	40.36	30.00	31.50	32.30	2.86	-40.11	-75.60
7.80	11.99	-34.72	-21.70	-11.61	6.27	0.93	40.22	29.90	31.57	32.20	2.90	-40.51	-74.78
8.00	11.92	-34.50	-19.48	-11.68	6.17	0.93	39.82	29.80	31.43	32.10	2.95	-42.39	-75.33
8.20	11.86	-34.34	-18.12	-11.75	6.06	0.94	39.60	29.60	31.23	32.00	2.99	-43.36	-75.70
8.40	11.86	-34.18	-17.33	-12.02	5.96	0.95	39.51	29.40	31.33	32.20	3.12	-44.32	-75.56
8.60	11.86	-33.97	-17.28	-12.35	5.83	0.95	39.20	29.30	31.07	31.70	3.15	-44.85	-74.89
8.80	11.84	-33.67	-18.01	-12.61	5.70	0.95	38.96	29.10	30.93	31.70	3.14	-44.48	-73.28
9.00	11.81	-33.50	-19.80	-12.75	5.61	0.95	38.85	29.00	30.87	31.80	3.22	-44.30	-71.94
9.20	11.74	-33.29	-23.57	-12.72	5.56	0.95	38.53	29.00	30.43	31.40	3.31	-44.46	-69.59
9.40	11.64	-33.13	-26.47	-12.54	5.54	0.94	38.21	28.90	30.60	32.10	3.44	-45.04	-68.86
9.60	11.45	-33.02	-25.96	-12.22	5.58	0.94	38.02	29.00	30.63	31.40	3.53	-42.36	-68.81
9.80	11.23	-33.01	-26.80	-12.00	5.66	0.93	37.70	28.90	30.63	31.60	3.66	-40.54	-67.37
10.00	10.97	-33.01	-21.69	-12.05	5.81	0.94	37.51	29.00	30.77	31.40	3.88	-41.18	-64.58

## 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:  $V_{DD} = +8\text{ V}$ ,  $I_{DD} = 400\text{ mA}$  @ Temperature =  $-45^{\circ}\text{C}$

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output	1dB Comp. Output	3dB Comp. Output	Psat Output	Noise Figure
					K	Measure					
(GHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
0.01	19.21	-85.88	-23.49	-24.95	1171.95	1.00	42.97	25.80	28.48	29.74	-
0.10	17.75	-71.98	-21.77	-11.14	234.68	0.93	38.28	25.61	27.85	28.90	-
0.30	15.90	-62.09	-19.63	-10.13	90.72	0.91	39.69	26.90	28.20	29.85	7.75
0.50	15.20	-56.63	-18.31	-9.72	51.51	0.91	39.24	27.02	28.23	29.87	5.69
1.00	14.18	-51.33	-15.44	-9.75	31.16	0.92	37.85	27.19	28.31	29.87	4.14
1.20	14.25	-49.18	-14.11	-10.11	24.08	0.94	38.90	27.20	28.31	29.92	3.83
1.40	14.11	-48.47	-13.30	-10.52	22.56	0.95	38.80	27.31	28.42	30.00	3.57
1.60	14.01	-47.66	-12.59	-10.97	20.82	0.97	38.18	27.38	28.51	30.06	3.35
1.80	13.93	-46.90	-12.22	-11.50	19.31	0.98	39.31	27.35	28.48	30.04	3.13
2.00	13.88	-46.17	-11.99	-12.09	17.96	1.00	38.35	27.30	28.42	29.98	2.92
2.20	13.85	-45.52	-12.12	-12.63	16.88	1.00	38.12	27.62	28.76	30.28	2.74
2.40	13.85	-44.91	-12.39	-13.07	15.87	1.01	38.24	27.25	28.37	30.00	2.55
2.60	13.86	-44.28	-13.02	-13.28	14.94	1.00	38.29	27.70	28.81	30.36	2.35
2.80	13.88	-43.71	-13.86	-13.20	14.02	0.99	38.15	27.58	28.67	30.22	2.19
3.00	13.90	-43.17	-15.24	-12.78	13.21	0.98	39.55	27.75	28.81	30.31	2.07
3.20	13.91	-42.66	-17.02	-12.33	12.50	0.96	38.11	27.79	28.81	30.33	2.02
3.40	13.92	-42.17	-19.75	-11.83	11.84	0.95	38.00	27.98	28.98	30.46	1.93
3.60	13.91	-41.76	-23.84	-11.28	11.23	0.93	37.89	28.00	28.99	30.42	1.91
3.80	13.89	-41.28	-30.62	-10.83	10.67	0.92	37.90	27.99	29.00	30.67	1.93
4.00	13.88	-40.92	-35.27	-10.53	10.16	0.91	37.69	28.11	29.18	30.76	1.93
4.20	13.84	-40.57	-29.03	-10.29	9.75	0.90	39.45	28.42	29.80	30.81	1.89
4.40	13.79	-40.22	-24.20	-10.09	9.35	0.90	39.27	28.28	29.70	30.72	1.89
4.60	13.77	-39.86	-22.08	-10.11	8.98	0.90	39.91	28.64	30.08	31.14	1.96
4.80	13.76	-39.47	-20.78	-10.33	8.62	0.91	39.81	28.52	29.90	31.05	1.98
5.00	13.76	-39.08	-20.34	-10.54	8.26	0.92	39.68	28.53	29.87	31.10	2.02
5.20	13.77	-38.71	-20.34	-10.87	7.97	0.92	39.58	28.70	30.04	31.27	2.18
5.40	13.79	-38.40	-20.63	-11.40	7.74	0.93	39.50	28.66	29.99	31.25	2.00
5.60	13.81	-38.11	-20.93	-11.84	7.55	0.94	39.40	28.67	30.04	31.32	2.00
5.80	13.83	-37.65	-20.77	-12.35	7.21	0.95	39.29	28.64	30.02	31.26	1.95
6.00	13.83	-37.14	-21.08	-13.10	6.86	0.95	39.24	28.73	30.10	31.31	2.01
6.20	13.84	-36.85	-21.38	-13.45	6.66	0.96	39.20	28.64	30.06	31.26	1.90
6.40	13.82	-36.56	-21.64	-13.47	6.45	0.96	39.14	28.59	30.06	31.23	1.92
6.60	13.81	-36.27	-22.23	-13.56	6.25	0.96	39.05	28.71	30.21	31.27	1.90
6.80	13.79	-36.02	-23.14	-13.37	6.09	0.95	38.89	28.59	30.25	31.27	1.93
7.00	13.74	-35.80	-25.04	-12.87	5.93	0.95	38.70	28.27	29.98	31.10	1.93
7.20	13.69	-35.56	-26.97	-12.39	5.79	0.94	38.58	28.35	30.03	31.11	1.98
7.40	13.62	-35.36	-26.01	-11.97	5.68	0.93	38.51	28.13	29.84	30.94	2.03
7.60	13.54	-35.26	-23.77	-11.39	5.59	0.92	38.38	28.09	29.78	30.92	2.02
7.80	13.46	-35.06	-21.31	-11.08	5.49	0.92	38.20	28.33	29.95	31.01	2.06
8.00	13.40	-34.91	-19.34	-11.18	5.39	0.93	37.99	28.02	29.71	30.75	2.14
8.20	13.37	-34.71	-17.91	-11.26	5.28	0.93	37.74	27.94	29.61	30.74	2.18
8.40	13.38	-34.56	-16.97	-11.43	5.17	0.94	37.51	27.95	29.59	30.75	2.23
8.60	13.40	-34.30	-16.73	-11.82	5.03	0.95	37.33	27.69	29.37	30.57	2.24
8.80	13.44	-34.03	-17.26	-12.18	4.89	0.95	37.11	27.56	29.15	30.40	2.21
9.00	13.46	-33.77	-18.72	-12.48	4.78	0.95	36.83	27.64	29.25	30.36	2.30
9.20	13.47	-33.50	-22.19	-12.69	4.68	0.95	36.55	27.35	28.95	30.21	2.33
9.40	13.44	-33.29	-25.74	-12.78	4.60	0.94	36.36	27.30	28.90	30.11	2.40
9.60	13.32	-33.12	-23.09	-12.38	4.56	0.94	36.20	27.31	28.97	30.16	2.49
9.80	13.16	-33.00	-22.36	-12.07	4.54	0.93	36.06	27.11	28.80	29.99	2.56
10.00	12.96	-32.91	-21.03	-12.04	4.59	0.94	35.92	27.39	29.11	30.16	2.71

## 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:  $V_{DD} = +8\text{ V}$ ,  $I_{DD} = 400\text{ mA}$  @ Temperature =  $+85^{\circ}\text{C}$

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output	1dB Comp. Output	3dB Comp. Output	Psat Output	Noise Figure
					K	Measure					
(GHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
0.01	17.91	-83.75	-22.17	-20.86	981.26	1.00	41.00	25.06	28.20	29.66	-
0.10	15.97	-69.29	-20.88	-8.85	198.19	0.88	39.22	25.07	27.66	28.79	-
0.30	14.05	-59.94	-19.25	-8.21	82.14	0.86	40.50	26.67	28.15	29.70	9.24
0.50	13.39	-54.68	-18.23	-8.08	47.96	0.86	43.03	26.90	28.19	29.70	7.24
1.00	12.58	-49.32	-15.53	-8.56	28.74	0.88	43.44	27.14	28.29	29.67	5.64
1.20	12.62	-47.45	-14.23	-8.98	23.01	0.90	43.61	27.06	28.21	29.64	5.34
1.40	12.54	-46.51	-13.40	-9.48	21.07	0.92	43.82	27.21	28.34	29.73	5.02
1.60	12.48	-45.58	-12.70	-10.09	19.23	0.95	43.88	27.28	28.39	29.77	4.78
1.80	12.43	-44.74	-12.32	-10.77	17.73	0.97	43.82	27.17	28.30	29.70	4.52
2.00	12.42	-43.96	-12.07	-11.44	16.41	0.98	43.96	27.18	28.33	29.70	4.25
2.20	12.39	-43.27	-12.23	-11.97	15.34	0.99	43.68	27.43	28.54	29.88	4.02
2.40	12.41	-42.63	-12.50	-12.44	14.34	1.00	43.37	26.88	28.08	29.54	3.83
2.60	12.43	-41.99	-13.22	-12.86	13.49	0.99	43.33	27.62	28.66	30.03	3.60
2.80	12.45	-41.40	-14.23	-12.80	12.67	0.98	43.45	27.33	28.39	29.79	3.48
3.00	12.46	-40.85	-15.85	-12.45	11.96	0.97	43.33	27.54	28.55	29.89	3.33
3.20	12.46	-40.32	-18.02	-12.02	11.32	0.95	43.28	27.75	28.74	30.04	3.25
3.40	12.45	-39.86	-21.41	-11.47	10.76	0.94	43.26	27.77	28.71	30.02	3.17
3.60	12.41	-39.46	-26.68	-10.99	10.25	0.92	43.27	27.90	28.81	30.07	3.15
3.80	12.39	-39.01	-32.12	-10.74	9.76	0.91	43.22	27.99	28.89	30.34	3.22
4.00	12.36	-38.65	-28.88	-10.47	9.32	0.91	43.20	28.00	28.94	30.34	3.25
4.20	12.29	-38.28	-24.31	-10.24	8.98	0.91	44.06	28.48	29.79	30.69	3.20
4.40	12.25	-37.97	-21.63	-10.32	8.65	0.91	43.78	28.36	29.69	30.63	3.17
4.60	12.24	-37.57	-20.42	-10.57	8.32	0.92	43.64	28.66	29.90	30.94	3.23
4.80	12.24	-37.21	-19.87	-11.01	8.02	0.93	43.40	28.61	29.82	30.89	3.25
5.00	12.24	-36.82	-20.20	-11.41	7.73	0.93	43.22	28.61	29.78	30.90	3.30
5.20	12.24	-36.41	-20.92	-11.87	7.45	0.94	43.12	28.71	29.85	31.00	3.58
5.40	12.26	-36.09	-22.26	-12.49	7.24	0.95	43.04	28.66	29.81	30.96	3.34
5.60	12.27	-35.79	-23.62	-12.98	7.05	0.95	42.88	28.66	29.82	30.99	3.33
5.80	12.27	-35.38	-24.37	-13.51	6.78	0.95	42.69	28.62	29.77	30.95	3.38
6.00	12.25	-35.04	-24.91	-14.09	6.56	0.96	42.54	28.63	29.79	30.95	3.41
6.20	12.21	-34.76	-24.58	-14.10	6.39	0.96	42.39	28.54	29.75	30.89	3.31
6.40	12.16	-34.51	-24.11	-13.99	6.24	0.96	42.19	28.42	29.69	30.82	3.36
6.60	12.12	-34.24	-24.23	-14.06	6.09	0.96	41.99	28.49	29.75	30.85	3.38
6.80	12.05	-34.04	-25.05	-13.59	5.98	0.95	41.75	28.38	29.70	30.78	3.40
7.00	11.97	-33.87	-27.08	-13.07	5.88	0.95	41.48	28.08	29.45	30.57	3.47
7.20	11.89	-33.71	-28.75	-12.79	5.79	0.94	41.26	28.16	29.51	30.59	3.49
7.40	11.80	-33.53	-27.39	-12.38	5.72	0.94	41.12	27.98	29.40	30.42	3.59
7.60	11.70	-33.39	-24.53	-12.07	5.67	0.93	40.96	27.89	29.30	30.33	3.65
7.80	11.62	-33.25	-21.57	-12.14	5.61	0.94	40.79	28.03	29.35	30.42	3.71
8.00	11.54	-33.10	-19.45	-12.23	5.54	0.94	40.54	27.79	29.17	30.16	3.78
8.20	11.48	-32.91	-18.26	-12.28	5.45	0.95	40.19	27.59	28.95	30.05	3.88
8.40	11.45	-32.78	-17.63	-12.58	5.37	0.95	39.94	27.57	28.87	30.06	3.97
8.60	11.42	-32.58	-17.82	-12.77	5.28	0.96	39.76	27.43	28.79	29.90	4.01
8.80	11.38	-32.36	-18.75	-12.82	5.20	0.95	39.50	27.09	28.42	29.62	4.09
9.00	11.30	-32.19	-20.78	-12.75	5.16	0.95	39.14	27.17	28.53	29.72	4.17
9.20	11.19	-32.07	-26.35	-12.52	5.16	0.94	38.88	26.97	28.35	29.55	4.27
9.40	11.03	-31.97	-28.78	-12.12	5.18	0.93	38.59	26.72	28.15	29.38	4.39
9.60	10.81	-31.95	-27.27	-11.86	5.28	0.93	37.93	26.79	28.29	29.44	4.53
9.80	10.57	-31.92	-26.46	-11.78	5.40	0.93	37.70	26.53	28.19	29.29	4.72
10.00	10.30	-31.96	-22.42	-12.00	5.58	0.94	37.48	26.60	28.26	29.29	4.89

*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:  $V_{DD} = +8\text{ V}$ ,  $I_{DD} = 400\text{ mA}$  @ Temperature = +25°C

Power	OIP2 (@1 GHz)	OIP2 (@4 GHz)	OIP2 (@8 GHz)
(dBm)	(dBm)	(dBm)	(dBm)
11.00	43.66	44.87	45.35
12.00	43.55	44.74	45.10
13.00	43.41	44.55	44.92
14.00	43.25	44.39	44.72
15.00	43.10	44.19	44.46
16.00	42.99	43.95	44.22
17.00	42.99	43.71	43.96
18.00	43.23	43.50	43.76
19.00	43.92	43.39	43.72
20.00	45.03	43.44	43.90
21.00	47.00	43.73	44.50

*Typical Performance Data*

TEST CONDITIONS:  $V_{DD} = +8\text{ V}$ ,  $V_{G2} = +3\text{ V}$ ,  $I_{DD} = 400\text{ mA}$  @ Temperature =  $+25^{\circ}\text{C}$

FREQ	P <sub>IN</sub>	Gain	FREQ	P <sub>IN</sub>	Gain
(GHz)	(dBm)	(dB)	(GHz)	(dBm)	(dB)
1	0	13.1	8	0	12.2
1	1	13.2	8	1	12.3
1	2	13.2	8	2	12.3
1	3	13.2	8	3	12.3
1	4	13.2	8	4	12.3
1	5	13.2	8	5	12.3
1	6	13.2	8	6	12.3
1	7	13.2	8	7	12.3
1	8	13.2	8	8	12.3
1	9	13.3	8	9	12.3
1	10	13.3	8	10	12.3
1	11	13.3	8	11	12.4
1	12	13.2	8	12	12.4
1	13	13.1	8	13	12.3
1	14	12.8	8	14	12.2
1	15	12.5	8	15	12.0
1	16	12.0	8	16	11.7
1	17	11.4	8	17	11.3
1	18	10.7	8	18	10.8
1	19	10.0	8	19	10.2
1	20	9.3	8	20	9.6
1	21	8.5	8	21	9.0
1	22	7.7	8	22	8.3
1	23	6.9	8	23	7.6
1	24	6.2	8	24	6.9
1	25	5.4	8	25	6.1
4	0	12.9			
4	1	12.9			
4	2	12.9			
4	3	12.9			
4	4	12.9			
4	5	12.9			
4	6	12.9			
4	7	12.9			
4	8	13.0			
4	9	13.0			
4	10	13.0			
4	11	13.0			
4	12	13.0			
4	13	13.0			
4	14	12.9			
4	15	12.7			
4	16	12.3			
4	17	11.9			
4	18	11.3			
4	19	10.7			
4	20	10.0			
4	21	9.3			
4	22	8.6			
4	23	7.8			
4	24	7.0			
4	25	6.3			

## 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:  $V_{DD} = +8\text{ V}$ ,  $I_{DD} = 400\text{ mA}$  @ Temperature = +25°C

Power	P <sub>OUT</sub> (@1 GHz)	P <sub>OUT</sub> (@4 GHz)	P <sub>OUT</sub> (@8 GHz)	I <sub>DD</sub> (@1 GHz)	I <sub>DD</sub> (@4 GHz)	I <sub>DD</sub> (@8 GHz)	P <sub>DISS</sub> (@1 GHz)	P <sub>DISS</sub> (@4 GHz)	P <sub>DISS</sub> (@8 GHz)	PAE (@1 GHz)	PAE (@4 GHz)	PAE (@8 GHz)
(dBm)	(dBm)	(dBm)	(dBm)	mA	mA	mA	(W)	(W)	(W)	(%)	(%)	(%)
0	13.34	12.98	12.28	382.21	385.43	385.97	3.04	3.06	3.07	0.67	0.61	0.51
1	14.40	14.03	13.35	384.77	387.74	386.95	3.05	3.08	3.08	0.85	0.77	0.66
2	15.42	15.04	14.36	385.73	388.04	387.26	3.05	3.07	3.07	1.07	0.98	0.83
3	16.42	16.04	15.36	383.24	387.60	386.14	3.02	3.06	3.06	1.36	1.23	1.05
4	17.43	17.05	16.36	382.00	385.84	384.59	3.00	3.04	3.04	1.73	1.56	1.32
5	18.44	18.05	17.36	379.52	384.51	383.06	2.97	3.02	3.01	2.19	1.97	1.67
6	19.45	19.05	18.36	377.29	382.91	381.68	2.93	2.99	2.99	2.78	2.49	2.11
7	20.47	20.06	19.36	375.12	381.63	379.17	2.89	2.96	2.95	3.54	3.15	2.68
8	21.48	21.06	20.37	372.51	380.23	377.56	2.85	2.92	2.92	4.50	3.99	3.39
9	22.50	22.07	21.38	369.60	378.42	375.67	2.79	2.87	2.88	5.73	5.06	4.30
10	23.51	23.08	22.39	365.96	376.85	373.52	2.71	2.82	2.82	7.30	6.41	5.46
11	24.49	24.09	23.40	364.10	375.40	371.45	2.64	2.76	2.77	9.22	8.11	6.93
12	25.43	25.08	24.39	361.37	373.72	370.19	2.56	2.68	2.70	11.52	10.25	8.75
13	26.29	26.04	25.36	359.30	374.31	369.55	2.47	2.61	2.63	14.10	12.75	10.95
14	27.05	26.94	26.26	357.20	374.83	370.61	2.38	2.53	2.57	16.84	15.64	13.41
15	27.68	27.75	27.06	355.03	378.00	374.21	2.29	2.46	2.52	19.49	18.62	15.93
16	28.18	28.42	27.74	352.20	383.90	380.97	2.20	2.42	2.49	21.89	21.29	18.21
17	28.58	28.97	28.32	352.18	393.59	392.43	2.15	2.41	2.51	23.76	23.45	20.03
18	28.91	29.44	28.81	355.11	406.26	409.46	2.13	2.43	2.58	25.09	25.08	21.27
19	29.19	29.83	29.23	360.95	418.78	430.14	2.14	2.47	2.68	25.87	26.29	22.05
20	29.42	30.15	29.61	368.00	431.21	452.53	2.17	2.52	2.81	26.23	27.05	22.47
21	29.63	30.42	29.93	377.02	443.43	475.90	2.23	2.57	2.95	26.14	27.41	22.59
22	29.81	30.65	30.23	386.32	456.05	500.72	2.29	2.65	3.11	25.74	27.38	22.40
23	29.97	30.85	30.48	395.44	469.93	525.28	2.37	2.75	3.28	25.04	26.97	21.97
24	30.10	31.02	30.70	402.19	483.73	549.74	2.44	2.85	3.46	24.12	26.24	21.27
25	30.11	31.13	30.83	395.61	489.38	561.14	2.44	2.93	3.57	23.05	25.27	20.41



## Typical Performance Data

TEST CONDITIONS:  $V_{DD} = +8\text{ V}$ ,  $I_{DD} = 300\text{ mA}$ ,  $400\text{ mA}$ ,  $500\text{ mA}$  @ Temperature =  $+25^\circ\text{C}$

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
(GHz)	(dB)	(dB)	(dB)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)	(dB)	(dB)
0.01	18.1	18.6	18.8	24.63	24.92	25.27	29.43	29.68	29.93	-	-	-
0.1	16.1	16.6	17.0	25.27	24.99	25.30	28.71	28.77	29.10	-	-	-
0.3	14.1	14.6	15.1	26.31	26.74	26.47	28.67	29.01	29.00	8.66	8.71	8.77
0.5	13.4	13.9	14.4	26.52	26.94	26.75	28.70	29.02	29.02	6.65	6.65	6.75
1.0	12.6	13.1	13.5	26.81	27.16	27.26	28.78	29.01	29.16	4.98	5.05	5.18
1.2	12.7	13.2	13.6	26.78	27.09	27.31	28.86	29.01	29.24	4.64	4.69	4.84
1.4	12.6	13.1	13.5	26.78	27.20	27.34	28.86	29.10	29.24	4.34	4.39	4.54
1.6	12.5	13.0	13.4	26.81	27.27	27.41	28.90	29.16	29.29	4.10	4.16	4.29
1.8	12.5	13.0	13.4	26.78	27.16	27.36	28.91	29.11	29.27	3.82	3.95	4.04
2.0	12.5	13.0	13.3	26.89	27.13	27.57	29.00	29.09	29.39	3.59	3.65	3.83
2.2	12.5	12.9	13.3	26.84	27.41	27.43	28.94	29.34	29.30	3.35	3.45	3.60
2.4	12.5	13.0	13.3	26.58	26.94	27.10	28.78	29.01	29.13	3.14	3.24	3.39
2.6	12.5	13.0	13.4	26.68	27.55	27.27	28.88	29.43	29.26	2.94	3.06	3.23
2.8	12.6	13.0	13.4	26.97	27.31	27.72	29.18	29.23	29.57	2.79	2.87	3.06
3.0	12.6	13.0	13.4	27.12	27.48	27.85	29.20	29.31	29.58	2.67	2.73	2.93
3.2	12.6	13.0	13.4	27.16	27.63	27.92	29.21	29.42	29.62	2.62	2.68	2.86
3.4	12.6	13.0	13.4	27.42	27.67	28.30	29.43	29.42	29.85	2.56	2.62	2.82
3.6	12.5	13.0	13.4	27.34	27.79	28.27	29.39	29.45	29.82	2.56	2.62	2.79
3.8	12.5	13.0	13.4	27.21	27.82	28.00	29.24	29.49	29.58	2.59	2.64	2.82
4.0	12.5	12.9	13.3	27.41	27.90	28.29	29.37	29.55	29.71	2.53	2.65	2.78
4.2	12.4	12.9	13.3	27.83	28.65	29.17	30.63	30.68	30.73	2.54	2.61	2.74
4.4	12.4	12.8	13.2	27.87	28.50	29.27	30.70	30.60	30.87	2.53	2.59	2.72
4.6	12.4	12.8	13.2	27.97	28.74	29.37	30.83	30.92	30.97	2.56	2.63	2.78
4.8	12.3	12.8	13.2	27.87	28.73	29.33	30.80	30.89	30.97	2.58	2.68	2.80
5.0	12.3	12.8	13.2	27.73	28.71	29.27	30.70	30.89	30.87	2.61	2.73	2.82
5.2	12.3	12.8	13.2	27.80	28.81	29.33	30.77	31.00	30.97	2.68	2.70	2.83
5.4	12.4	12.8	13.2	27.77	28.78	29.27	30.77	30.98	31.00	2.50	2.66	2.79
5.6	12.4	12.9	13.3	27.67	28.78	29.20	30.67	31.02	30.87	2.50	2.69	2.80
5.8	12.4	12.9	13.3	27.73	28.73	29.37	30.77	30.97	31.10	2.65	2.67	3.14
6.0	12.4	12.9	13.3	27.87	28.76	29.43	30.83	30.98	31.07	2.41	2.64	2.71
6.2	12.3	12.8	13.3	27.63	28.69	29.20	30.73	30.94	31.00	2.44	2.60	2.69
6.4	12.3	12.8	13.2	27.67	28.61	29.17	30.77	30.90	31.03	2.46	2.61	2.71
6.6	12.2	12.8	13.2	27.73	28.70	29.30	30.87	30.96	31.10	2.54	2.65	2.73
6.8	12.2	12.7	13.1	27.40	28.63	29.07	30.80	30.93	31.00	2.55	2.69	2.77
7.0	12.1	12.6	13.1	27.20	28.38	28.80	30.60	30.74	30.70	2.59	2.71	2.81
7.2	12.0	12.6	13.0	27.33	28.43	28.93	30.70	30.75	30.80	2.62	2.80	2.86
7.4	12.0	12.5	12.9	27.23	28.28	28.80	30.63	30.60	30.80	2.72	2.85	2.95
7.6	11.9	12.4	12.8	27.10	28.19	28.60	30.43	30.53	30.53	2.72	2.86	2.94
7.8	11.8	12.3	12.8	27.13	28.29	28.70	30.47	30.60	30.60	2.75	2.92	3.00
8.0	11.7	12.2	12.7	26.87	28.10	28.40	30.30	30.39	30.50	2.83	2.98	3.03
8.2	11.6	12.2	12.6	26.77	27.90	28.37	30.17	30.28	30.27	2.90	3.03	3.11
8.4	11.6	12.2	12.6	26.80	27.89	28.40	30.27	30.28	30.40	2.99	3.13	3.21
8.6	11.6	12.2	12.6	26.67	27.79	28.27	29.97	30.14	30.10	3.00	3.17	3.25
8.8	11.5	12.1	12.6	26.57	27.51	28.10	29.90	29.88	30.03	3.05	3.19	3.29
9.0	11.5	12.1	12.6	26.50	27.59	28.00	29.90	29.94	30.10	3.11	3.22	3.30
9.2	11.4	12.0	12.5	26.37	27.41	27.67	29.50	29.79	29.57	3.25	3.34	3.40
9.4	11.3	11.9	12.4	26.23	27.18	27.47	29.63	29.61	29.83	3.32	3.42	3.51
9.6	11.1	11.7	12.3	26.50	27.26	27.63	29.57	29.69	29.63	3.50	3.58	3.65
9.8	10.8	11.5	12.0	26.43	27.01	27.47	29.50	29.55	29.70	3.62	3.70	3.76
10.0	10.6	11.2	11.8	26.57	27.08	27.37	29.50	29.60	29.67	3.62	3.90	3.93

*Typical Performance Data*

TEST CONDITIONS:  $V_{DD} = +8\text{ V}$ ,  $V_{G2} = +3\text{ V}$ ,  $I_{DD} = 400\text{ mA}$  @ Temperature = +25°C

FREQ	P <sub>OUT</sub>	2nd Harmonic	FREQ	P <sub>OUT</sub>	3rd Harmonic
(GHz)	(dBm)	(dBc)	(GHz)	(dBm)	(dBc)
2.0	3.0	-31.2	2.0	3.0	-63.0
2.0	4.0	-32.4	2.0	4.0	-64.4
2.0	5.0	-33.9	2.0	5.0	-65.4
2.0	6.0	-34.3	2.0	6.0	-65.9
2.0	7.0	-34.9	2.0	7.0	-67.8
2.0	8.0	-34.3	2.0	8.0	-68.0
2.0	9.0	-35.7	2.0	9.0	-69.2
2.0	10.0	-35.6	2.0	10.0	-69.7
2.0	11.0	-36.4	2.0	11.0	-71.1
2.0	12.0	-37.2	2.0	12.0	-71.6
2.0	13.0	-37.0	2.0	13.0	-71.7
2.0	14.0	-36.0	2.0	14.0	-72.9
2.0	15.0	-35.9	2.0	15.0	-69.0
2.0	16.0	-36.5	2.0	16.0	-68.4
2.0	17.0	-33.7	2.0	17.0	-66.4
2.0	18.0	-33.7	2.0	18.0	-63.8
2.0	19.0	-33.1	2.0	19.0	-61.3
2.0	20.0	-31.0	2.0	20.0	-58.4
2.0	21.0	-29.8	2.0	21.0	-56.5
2.0	22.0	-28.9	2.0	22.0	-55.3
2.0	23.0	-27.8	2.0	23.0	-56.0
2.0	24.0	-27.1	2.0	24.0	-51.9
4.0	3.0	-38.9	4.0	3.0	-72.1
4.0	4.0	-39.9	4.0	4.0	-72.1
4.0	5.0	-39.7	4.0	5.0	-73.6
4.0	6.0	-39.9	4.0	6.0	-75.0
4.0	7.0	-40.9	4.0	7.0	-75.0
4.0	8.0	-41.2	4.0	8.0	-74.6
4.0	9.0	-41.6	4.0	9.0	-73.5
4.0	10.0	-39.9	4.0	10.0	-72.0
4.0	11.0	-39.3	4.0	11.0	-71.0
4.0	12.0	-38.6	4.0	12.0	-69.0
4.0	13.0	-38.8	4.0	13.0	-66.8
4.0	14.0	-37.5	4.0	14.0	-65.0
4.0	15.0	-37.1	4.0	15.0	-62.6
4.0	16.0	-35.6	4.0	16.0	-60.6
4.0	17.0	-34.9	4.0	17.0	-58.3
4.0	18.0	-33.5	4.0	18.0	-55.5
4.0	19.0	-32.1	4.0	19.0	-53.3
4.0	20.0	-30.8	4.0	20.0	-51.0
4.0	21.0	-29.7	4.0	21.0	-48.7
4.0	22.0	-28.51	4.0	22.0	-46.50
4.0	23.0	-27.16	4.0	23.0	-44.53
4.0	24.0	-25.92	4.0	24.0	-42.93
8.0	3.0	-40.21	8.0	3.0	-67.71
8.0	4.0	-40.28	8.0	4.0	-68.87
8.0	5.0	-40.82	8.0	5.0	-69.63
8.0	6.0	-41.10	8.0	6.0	-70.55
8.0	7.0	-42.18	8.0	7.0	-71.83
8.0	8.0	-41.23	8.0	8.0	-73.21
8.0	9.0	-43.09	8.0	9.0	-74.10
8.0	10.0	-42.39	8.0	10.0	-75.33
8.0	11.0	-41.74	8.0	11.0	-76.56
8.0	12.0	-40.69	8.0	12.0	-77.29
8.0	13.0	-39.65	8.0	13.0	-78.71
8.0	14.0	-38.61	8.0	14.0	-79.07
8.0	15.0	-37.77	8.0	15.0	-79.43
8.0	16.0	-37.01	8.0	16.0	-79.08
8.0	17.0	-35.71	8.0	17.0	-78.36
8.0	18.0	-34.74	8.0	18.0	-77.28
8.0	19.0	-33.61	8.0	19.0	-76.38
8.0	20.0	-32.29	8.0	20.0	-74.95
8.0	21.0	-31.04	8.0	21.0	-71.86
8.0	22.0	-29.44	8.0	22.0	-68.68
8.0	23.0	-28.14	8.0	23.0	-66.09
8.0	24.0	-26.94	8.0	24.0	-64.27