

## 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: Vd = 4.0V, Id = 26mA @ Temperature = +25°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output	1dB Comp. Output	Noise Figure
					K	Measure			
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dB)
20000	14.41	57.43	4.77	13.43	45.05	1.27	10.43	0.12	4.72
20500	15.18	54.84	5.67	12.45	33.09	1.20	9.98	0.18	4.38
21000	15.84	53.94	6.69	12.13	29.72	1.14	10.28	0.28	4.16
21500	16.34	53.39	7.90	12.15	28.08	1.09	10.31	0.58	3.93
22000	16.68	53.08	9.29	11.94	27.37	1.04	11.42	0.97	3.78
22500	16.90	53.76	10.35	12.17	29.76	1.02	11.48	1.08	3.69
23000	17.08	53.40	11.27	12.27	28.56	1.01	11.71	1.34	3.55
23500	17.25	52.90	12.27	12.79	27.09	1.00	11.34	1.34	3.54
24000	17.43	51.49	13.39	13.04	22.92	0.99	11.24	1.44	3.48
24500	17.62	51.06	14.59	13.01	21.59	0.98	11.95	1.56	3.41
25000	17.81	49.99	16.17	13.47	19.00	0.98	11.65	1.58	3.38
25500	17.94	48.93	18.28	13.90	16.77	0.97	11.31	1.96	3.33
26000	18.04	48.37	18.83	14.75	15.71	0.98	12.03	2.10	3.26
26500	18.10	47.97	18.24	15.43	14.92	0.98	12.61	2.36	3.24
27000	18.17	47.73	17.60	16.06	14.42	0.99	12.84	2.41	3.22
27500	18.29	46.95	17.48	16.52	13.04	0.99	11.58	2.67	3.20
28000	18.44	45.66	17.73	17.54	11.11	1.00	13.24	2.75	3.21
28500	18.52	45.22	18.68	17.84	10.51	0.99	12.75	2.97	3.18
29000	18.54	45.71	18.50	17.55	11.07	0.99	13.27	3.27	3.18
29500	18.53	45.33	17.90	17.46	10.58	1.00	13.48	3.57	3.18
30000	18.54	45.73	16.56	17.09	10.99	1.00	14.00	3.90	3.21
30500	18.62	45.60	15.78	17.65	10.71	1.01	14.06	4.12	3.23
31000	18.74	45.61	15.52	18.16	10.57	1.01	14.58	4.45	3.21
31500	18.85	46.08	15.78	19.62	11.08	1.01	14.09	4.53	3.24
32000	18.99	45.27	17.04	22.36	10.07	1.01	15.10	5.01	3.28
32500	19.09	45.53	18.42	24.80	10.32	1.01	14.92	4.84	3.24
33000	19.13	45.59	20.87	21.05	10.37	1.00	15.39	5.36	3.19
33500	19.08	45.18	21.79	16.40	9.83	0.98	15.63	5.74	3.26
34000	19.13	43.45	18.10	13.70	7.80	0.97	15.83	5.99	3.25
34500	19.06	44.85	14.58	10.82	8.70	0.94	16.60	6.63	3.24
35000	18.85	46.12	13.30	9.39	9.82	0.92	16.70	6.39	3.21
35500	18.62	45.17	11.36	7.98	8.37	0.89	16.06	6.27	3.23
36000	18.34	45.88	11.22	7.43	9.07	0.88	15.68	6.08	3.25
36500	18.26	46.87	11.63	6.76	9.92	0.84	16.37	6.14	3.36
37000	18.28	47.48	11.84	6.49	10.45	0.83	15.48	5.75	3.45
37500	18.23	48.03	12.41	6.14	10.99	0.80	15.24	5.93	3.13
38000	17.85	48.82	13.21	6.21	12.79	0.80	15.71	6.53	3.63
38500	17.33	47.35	12.43	6.44	11.53	0.82	15.34	6.01	3.34
39000	17.48	46.65	11.47	6.47	10.27	0.83	15.59	6.65	3.31
39500	17.58	47.59	10.70	6.41	11.08	0.84	15.08	6.92	3.40
40000	17.36	48.20	10.45	6.46	12.17	0.85	15.29	7.14	3.45
40500	16.83	51.08	9.54	6.92	18.16	0.89	17.21	8.26	3.45
41000	16.09	52.97	8.40	7.41	24.30	0.94	16.58	8.28	3.60
41500	15.21	57.02	7.49	7.96	42.34	0.99	16.98	8.59	3.78
42000	14.33	60.54	7.01	8.12	69.05	1.02	17.72	8.70	3.82
42500	13.43	63.85	6.92	8.19	112.08	1.02	18.56	8.58	3.81
43000	12.49	64.41	7.31	8.31	136.68	1.01	18.33	8.23	3.86
43500	11.46	63.82	8.05	7.52	143.97	0.95	18.31	7.91	3.97

## 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: Vd = 3.8V, Id = 24mA @ Temperature = +25°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output	1dB Comp. Output	Noise Figure
					K	Measure			
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dB)
20000	14.16	56.82	4.70	13.49	42.91	1.28	9.99	-0.27	4.76
20500	14.94	55.25	5.60	12.50	35.47	1.20	9.46	-0.22	4.45
21000	15.59	53.46	6.60	12.18	28.79	1.14	9.82	-0.11	4.17
21500	16.10	53.26	7.79	12.19	28.35	1.09	9.83	0.19	3.99
22000	16.44	52.66	9.16	11.98	26.72	1.05	11.03	0.58	3.78
22500	16.66	54.13	10.20	12.22	31.84	1.03	10.99	0.59	3.72
23000	16.84	52.94	11.11	12.31	27.79	1.01	11.12	0.95	3.61
23500	17.00	52.26	12.09	12.84	25.81	1.00	10.86	0.85	3.54
24000	17.18	51.66	13.21	13.08	24.03	0.99	10.72	1.04	3.51
24500	17.37	50.36	14.38	13.06	20.49	0.98	11.38	1.16	3.44
25000	17.55	49.59	15.94	13.53	18.65	0.98	11.11	1.18	3.40
25500	17.69	49.11	18.01	13.96	17.61	0.97	10.80	1.56	3.37
26000	17.78	48.57	18.60	14.82	16.53	0.98	11.58	1.69	3.30
26500	17.85	47.67	18.10	15.49	14.85	0.99	12.11	1.95	3.26
27000	17.92	46.90	17.49	16.16	13.51	0.99	12.14	2.00	3.25
27500	18.04	46.55	17.38	16.59	12.81	0.99	11.15	2.16	3.18
28000	18.19	46.27	17.67	17.65	12.26	1.00	12.56	2.35	3.25
28500	18.27	45.65	18.65	17.88	11.36	1.00	12.23	2.58	3.17
29000	18.30	45.49	18.53	17.55	11.10	0.99	12.56	2.87	3.21
29500	18.30	45.32	17.91	17.45	10.86	1.00	12.89	3.18	3.25
30000	18.31	45.40	16.57	17.06	10.86	1.00	13.14	3.41	3.23
30500	18.40	45.43	15.77	17.59	10.77	1.01	13.44	3.74	3.22
31000	18.53	45.59	15.51	18.08	10.81	1.01	13.85	4.08	3.24
31500	18.65	45.47	15.72	19.53	10.58	1.01	13.84	4.07	3.26
32000	18.79	45.00	16.98	22.12	9.98	1.01	14.57	4.56	3.31
32500	18.91	45.29	18.31	24.38	10.26	1.01	14.44	4.50	3.24
33000	18.95	45.01	20.71	20.75	9.89	1.00	15.26	5.02	3.28
33500	18.91	44.79	21.69	16.24	9.57	0.98	14.92	5.31	3.26
34000	18.96	43.19	18.11	13.56	7.71	0.96	15.82	5.56	3.25
34500	18.90	45.09	14.60	10.68	9.08	0.94	16.05	6.31	3.31
35000	18.70	45.54	13.33	9.26	9.32	0.91	15.64	6.08	3.20
35500	18.48	44.60	11.38	7.87	7.94	0.89	15.47	5.87	3.27
36000	18.20	45.60	11.23	7.32	8.88	0.87	15.31	5.67	3.21
36500	18.12	46.89	11.63	6.65	10.03	0.84	15.54	5.84	2.97
37000	18.13	46.61	11.85	6.39	9.55	0.82	14.88	5.44	3.10
37500	18.09	47.55	12.43	6.04	10.50	0.80	15.17	5.64	3.18
38000	17.71	48.43	13.22	6.11	12.34	0.79	14.85	6.12	3.30
38500	17.19	47.59	12.45	6.33	11.97	0.81	14.98	5.70	3.37
39000	17.33	46.27	11.52	6.37	9.95	0.83	15.46	6.33	3.44
39500	17.43	47.34	10.76	6.32	10.90	0.84	14.76	6.73	3.36
40000	17.20	49.30	10.53	6.36	14.00	0.84	14.92	6.97	3.39
40500	16.67	49.68	9.62	6.84	15.67	0.89	16.48	8.00	3.46
41000	15.93	52.65	8.46	7.34	23.83	0.94	16.25	8.06	3.68
41500	15.05	56.32	7.56	7.91	39.83	0.99	16.56	8.36	3.75
42000	14.17	59.39	7.07	8.08	61.70	1.01	17.81	8.42	3.85
42500	13.27	61.86	6.98	8.16	90.91	1.02	18.50	8.29	3.88
43000	12.33	65.10	7.37	8.28	151.17	1.01	17.47	7.95	3.86
43500	11.30	62.68	8.12	7.49	128.72	0.95	17.09	7.72	4.00

## 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: Vd = 4.2V, Id = 27mA @ Temperature = +25°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output	1dB Comp. Output	Noise Figure
					K	Measure			
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dB)
20000	14.64	56.75	4.83	13.40	40.87	1.27	10.92	0.47	4.70
20500	15.41	55.65	5.74	12.41	35.60	1.19	10.46	0.52	4.38
21000	16.06	53.85	6.77	12.09	28.82	1.13	10.79	0.72	4.14
21500	16.56	52.95	8.00	12.11	26.13	1.08	10.82	0.93	3.90
22000	16.89	53.39	9.41	11.90	27.77	1.04	12.01	1.32	3.75
22500	17.12	53.55	10.48	12.13	28.40	1.02	11.97	1.43	3.66
23000	17.30	53.37	11.42	12.22	27.81	1.01	12.07	1.78	3.55
23500	17.47	52.72	12.43	12.75	25.91	1.00	11.83	1.69	3.50
24000	17.66	52.10	13.57	12.99	23.98	0.99	11.76	1.79	3.45
24500	17.85	51.08	14.78	12.97	21.12	0.98	12.40	1.92	3.42
25000	18.03	49.96	16.40	13.42	18.44	0.97	12.08	2.03	3.38
25500	18.17	49.47	18.53	13.85	17.39	0.97	11.84	2.42	3.33
26000	18.26	48.61	19.02	14.69	15.71	0.98	12.57	2.55	3.27
26500	18.33	48.22	18.37	15.37	14.95	0.98	12.91	2.73	3.24
27000	18.40	47.78	17.69	16.02	14.14	0.99	13.40	2.77	3.20
27500	18.52	47.19	17.54	16.48	13.06	0.99	12.06	3.03	3.21
28000	18.66	46.44	17.80	17.53	11.85	1.00	13.55	3.20	3.18
28500	18.74	45.87	18.70	17.80	11.05	0.99	13.20	3.32	3.15
29000	18.75	45.96	18.54	17.55	11.13	0.99	13.77	3.61	3.21
29500	18.74	45.85	17.88	17.48	10.97	1.00	13.66	3.92	3.22
30000	18.74	45.57	16.55	17.13	10.55	1.00	14.20	4.24	3.21
30500	18.81	45.53	15.78	17.72	10.39	1.01	14.46	4.45	3.20
31000	18.93	45.91	15.56	18.22	10.72	1.01	14.88	4.88	3.21
31500	19.04	45.51	15.81	19.77	10.17	1.01	14.87	4.85	3.24
32000	19.16	45.79	17.15	22.66	10.49	1.01	15.52	5.33	3.27
32500	19.25	45.88	18.53	25.33	10.56	1.01	15.54	5.24	3.25
33000	19.28	45.60	20.99	21.40	10.21	1.00	15.45	5.75	3.27
33500	19.23	45.13	21.90	16.60	9.62	0.98	16.18	6.13	3.26
34000	19.27	43.18	18.04	13.85	7.45	0.97	16.88	6.37	3.34
34500	19.19	45.05	14.55	10.94	8.78	0.94	17.48	7.00	3.25
35000	18.98	46.43	13.29	9.52	10.05	0.92	16.36	6.76	3.18
35500	18.75	45.34	11.35	8.09	8.45	0.90	16.71	6.55	3.27
36000	18.46	45.96	11.23	7.54	9.08	0.88	16.46	6.35	3.15
36500	18.39	47.13	11.62	6.85	10.13	0.85	16.64	6.41	2.99
37000	18.41	47.56	11.83	6.60	10.46	0.83	16.41	6.12	3.20
37500	18.36	48.26	12.41	6.24	11.20	0.81	16.13	6.20	3.59
38000	17.97	49.32	13.20	6.32	13.45	0.80	16.25	6.90	3.24
38500	17.46	46.92	12.39	6.54	10.89	0.82	16.24	6.39	3.32
39000	17.61	46.84	11.43	6.56	10.42	0.84	16.12	7.02	3.35
39500	17.72	47.43	10.64	6.50	10.77	0.85	15.55	7.17	3.38
40000	17.50	48.84	10.37	6.54	12.95	0.85	15.99	7.37	3.47
40500	16.97	51.12	9.47	6.99	17.98	0.89	17.72	8.44	3.49
41000	16.23	54.18	8.33	7.47	27.54	0.94	17.28	8.53	3.61
41500	15.35	59.95	7.43	8.01	58.42	1.00	18.17	8.84	3.74
42000	14.47	61.47	6.95	8.16	75.50	1.02	19.07	8.95	3.81
42500	13.57	63.60	6.86	8.22	106.83	1.03	19.33	8.84	3.82
43000	12.63	68.16	7.25	8.32	206.64	1.01	19.02	8.42	3.87
43500	11.60	63.02	8.00	7.54	129.01	0.95	19.71	8.15	3.97

## 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: Vd = 4.00V, Id = 27mA @ Temperature = -45°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output	1dB Comp. Output	Noise Figure
					K	Measure			
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dB)
20000	16.05	57.66	4.46	13.25	36.80	1.29	10.52	0.07	3.46
20500	16.84	55.33	5.34	12.09	27.94	1.21	10.06	0.25	3.15
21000	17.53	53.84	6.36	11.62	23.52	1.14	10.34	0.36	2.93
21500	18.05	53.26	7.59	11.35	22.15	1.08	10.40	0.58	2.71
22000	18.37	53.49	9.04	11.34	23.23	1.04	11.62	1.10	2.58
22500	18.59	53.90	10.13	11.50	24.54	1.02	11.67	1.09	2.43
23000	18.79	53.59	11.07	11.88	23.77	1.01	11.97	1.61	2.42
23500	18.98	52.39	12.06	12.58	20.80	1.00	11.61	1.53	2.39
24000	19.17	51.50	13.16	12.87	18.72	0.99	11.60	1.65	2.31
24500	19.34	50.65	14.29	12.79	16.81	0.98	12.17	1.74	2.28
25000	19.50	49.85	15.89	12.76	15.24	0.97	11.84	1.76	2.28
25500	19.63	49.09	17.99	13.05	13.94	0.96	11.70	2.23	2.20
26000	19.75	48.58	18.28	13.55	13.05	0.97	12.48	2.37	2.16
26500	19.86	47.85	17.36	14.59	11.93	0.98	13.13	2.65	2.11
27000	19.97	47.33	16.57	15.70	11.14	0.99	13.26	2.63	2.07
27500	20.09	46.36	16.53	17.19	9.90	1.00	11.93	2.93	2.07
28000	20.22	45.78	17.10	18.31	9.18	1.00	13.49	3.12	2.09
28500	20.30	45.80	18.54	17.90	9.16	1.00	12.92	3.25	2.05
29000	20.34	45.29	18.28	17.30	8.56	0.99	13.52	3.53	2.07
29500	20.36	45.41	17.18	16.73	8.60	1.00	14.12	3.87	2.08
30000	20.37	45.30	15.45	16.94	8.42	1.01	14.10	4.16	2.10
30500	20.44	45.22	14.73	17.95	8.27	1.01	14.14	4.43	2.13
31000	20.57	45.23	14.60	19.73	8.18	1.02	14.89	4.83	2.09
31500	20.73	45.12	15.18	20.79	8.00	1.02	14.48	4.86	2.10
32000	20.88	44.90	16.76	22.79	7.77	1.01	15.41	5.32	2.12
32500	20.96	45.28	18.42	22.50	8.09	1.01	15.09	5.14	2.05
33000	20.99	45.22	21.30	19.78	8.01	0.99	15.84	5.73	2.11
33500	20.96	44.48	24.42	16.08	7.32	0.97	15.74	6.11	2.10
34000	20.94	43.23	21.36	13.73	6.24	0.96	16.71	6.68	2.15
34500	20.98	44.22	14.56	10.46	6.47	0.93	17.40	7.68	2.13
35000	20.66	45.53	12.72	8.58	7.25	0.90	17.23	7.56	2.00
35500	20.41	44.58	10.38	7.05	6.02	0.86	16.47	7.25	2.10
36000	19.95	45.89	10.15	6.42	6.98	0.84	16.16	7.27	2.01
36500	19.81	46.44	10.66	6.06	7.40	0.81	16.43	7.33	1.97
37000	19.87	46.70	11.02	5.88	7.49	0.80	16.37	6.90	2.12
37500	19.92	47.03	11.44	5.75	7.70	0.79	16.56	7.32	1.98
38000	19.63	49.25	11.91	5.74	10.38	0.78	16.40	8.52	2.27
38500	18.87	47.28	11.25	6.00	9.11	0.81	15.63	8.91	2.12
39000	18.97	46.11	10.21	5.84	7.55	0.82	16.09	7.77	2.16
39500	19.15	47.22	9.70	5.41	7.95	0.80	15.12	8.73	2.04
40000	18.99	48.76	10.02	5.54	9.88	0.80	15.94	8.70	2.24
40500	18.54	49.88	9.15	5.97	11.98	0.84	16.61	9.54	2.33
41000	17.83	53.99	7.74	6.66	20.79	0.92	17.10	9.56	2.39
41500	16.99	57.21	6.61	7.42	32.63	1.00	18.08	9.94	2.49
42000	16.15	61.79	6.13	8.04	60.83	1.05	18.48	10.14	2.54
42500	15.25	65.58	6.07	7.98	103.80	1.05	18.80	10.02	2.56
43000	14.32	73.56	6.52	7.57	293.53	1.01	19.17	9.71	2.51
43500	13.29	67.29	7.37	6.71	160.82	0.93	19.83	9.62	2.40

## 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: Vd = 3.8V, Id = 25mA @ Temperature = -45°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output	1dB Comp. Output	Noise Figure
					K	Measure			
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dB)
20000	15.95	56.65	4.37	13.34	32.76	1.30	10.21	-0.39	3.43
20500	16.75	55.30	5.25	12.07	27.86	1.22	9.64	-0.20	3.14
21000	17.45	53.99	6.30	11.58	24.01	1.15	9.97	-0.17	2.93
21500	17.97	53.28	7.52	11.29	22.31	1.09	10.04	0.14	2.68
22000	18.29	53.53	8.93	11.27	23.43	1.04	11.21	0.56	2.57
22500	18.51	53.84	9.99	11.47	24.49	1.02	11.20	0.65	2.46
23000	18.71	52.79	10.90	11.92	21.82	1.01	11.52	1.07	2.39
23500	18.91	52.36	11.89	12.65	20.89	1.00	11.24	0.99	2.39
24000	19.10	51.74	13.01	12.97	19.40	0.99	11.13	1.20	2.30
24500	19.27	50.38	14.11	12.85	16.44	0.98	11.73	1.29	2.28
25000	19.42	49.68	15.75	12.76	15.07	0.97	11.35	1.31	2.25
25500	19.55	49.03	17.86	12.98	13.96	0.96	11.32	1.78	2.20
26000	19.65	48.54	18.10	13.43	13.11	0.97	12.04	1.91	2.14
26500	19.76	47.51	17.13	14.50	11.56	0.98	12.55	2.10	2.11
27000	19.88	47.03	16.33	15.74	10.86	0.99	12.84	2.17	2.07
27500	20.01	46.64	16.33	17.42	10.32	1.00	11.54	2.48	2.08
28000	20.14	45.79	17.07	18.59	9.29	1.00	12.83	2.57	2.07
28500	20.23	45.25	18.74	17.92	8.67	0.99	12.32	2.80	2.06
29000	20.27	45.53	18.44	17.12	8.88	0.99	13.09	3.09	2.09
29500	20.29	45.11	17.09	16.59	8.37	1.00	13.19	3.42	2.08
30000	20.30	45.00	15.20	16.84	8.18	1.01	13.80	3.62	2.08
30500	20.37	45.24	14.47	17.96	8.33	1.02	13.81	3.90	2.08
31000	20.52	45.63	14.47	19.85	8.62	1.02	14.02	4.30	2.06
31500	20.68	45.06	15.22	21.00	7.99	1.02	13.83	4.33	2.10
32000	20.84	45.15	16.94	22.45	8.03	1.01	14.87	4.80	2.11
32500	20.93	45.00	18.58	21.95	7.85	1.00	14.66	4.52	2.05
33000	20.97	45.22	21.12	19.48	8.03	0.99	15.16	5.21	2.08
33500	20.94	44.84	24.11	16.07	7.64	0.98	15.25	5.60	2.09
34000	20.93	42.82	21.68	13.72	5.96	0.96	15.59	6.18	2.11
34500	20.99	44.06	14.51	10.39	6.33	0.93	16.43	7.19	2.12
35000	20.64	45.91	12.56	8.43	7.53	0.89	16.39	6.96	2.11
35500	20.39	44.81	10.22	6.86	6.10	0.85	15.79	6.76	2.09
36000	19.92	45.30	10.03	6.26	6.46	0.83	15.64	6.78	2.08
36500	19.80	46.16	10.68	5.90	7.09	0.80	16.13	7.07	2.05
37000	19.87	46.87	11.15	5.79	7.61	0.79	15.73	6.64	2.25
37500	19.93	47.83	11.55	5.67	8.38	0.78	15.50	7.07	2.27
38000	19.64	49.08	11.76	5.68	10.09	0.78	15.63	8.39	1.98
38500	18.86	47.05	11.01	5.91	8.78	0.80	15.24	8.68	2.09
39000	18.93	45.78	10.02	5.72	7.19	0.81	16.17	7.40	2.07
39500	19.11	46.65	9.67	5.26	7.34	0.79	15.17	8.38	2.15
40000	18.97	48.91	10.20	5.38	9.97	0.79	15.79	8.55	2.14
40500	18.53	50.48	9.24	5.81	12.75	0.83	16.18	9.27	2.32
41000	17.82	53.62	7.68	6.58	19.79	0.92	16.49	9.28	2.40
41500	16.97	57.05	6.49	7.39	31.85	1.00	17.96	9.66	2.45
42000	16.15	58.72	6.05	8.07	42.50	1.06	18.09	9.83	2.52
42500	15.26	62.27	6.05	7.99	70.69	1.05	17.98	9.70	2.52
43000	14.33	63.40	6.58	7.47	90.76	1.00	18.25	9.41	2.48
43500	13.29	64.73	7.45	6.57	119.23	0.92	17.84	9.29	2.48

## 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: Vd = 4.2V, Id = 28mA @ Temperature = -45°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output	1dB Comp. Output	Noise Figure
					K	Measure			
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dB)
20000	16.42	57.20	4.45	13.24	33.40	1.29	10.95	0.56	3.49
20500	17.23	55.39	5.36	11.95	26.92	1.21	10.57	0.62	3.12
21000	17.92	53.87	6.44	11.45	22.60	1.14	10.90	0.74	2.93
21500	18.44	53.04	7.71	11.15	20.68	1.08	10.99	1.05	2.72
22000	18.76	53.58	9.15	11.14	22.42	1.03	12.26	1.48	2.58
22500	18.97	54.23	10.21	11.37	24.37	1.01	12.18	1.57	2.49
23000	19.18	53.40	11.14	11.84	22.26	1.00	12.56	2.00	2.39
23500	19.38	52.86	12.17	12.60	21.02	1.00	12.12	1.91	2.37
24000	19.58	51.73	13.33	12.89	18.39	0.99	12.14	2.04	2.31
24500	19.75	51.06	14.48	12.74	16.84	0.98	12.72	2.13	2.35
25000	19.90	50.20	16.19	12.60	15.14	0.96	12.37	2.15	2.28
25500	20.03	49.09	18.36	12.79	13.27	0.96	12.24	2.62	2.23
26000	20.14	48.88	18.40	13.23	12.87	0.96	12.98	2.75	2.18
26500	20.26	47.94	17.23	14.34	11.48	0.98	13.65	3.05	2.10
27000	20.37	47.30	16.39	15.60	10.58	0.99	13.66	3.03	2.10
27500	20.50	47.21	16.42	17.41	10.41	1.00	12.40	3.32	2.10
28000	20.63	46.07	17.26	18.53	9.08	1.00	14.00	3.49	2.06
28500	20.70	45.73	18.96	17.81	8.69	0.99	13.39	3.63	2.02
29000	20.73	44.88	18.44	16.98	7.81	0.99	14.08	3.90	2.11
29500	20.74	45.09	16.92	16.51	7.92	1.00	14.38	4.24	2.13
30000	20.73	45.34	15.01	16.87	8.08	1.01	14.54	4.53	2.13
30500	20.80	45.75	14.38	18.14	8.41	1.02	14.62	4.80	2.12
31000	20.94	45.39	14.46	20.21	8.00	1.02	15.47	5.19	2.10
31500	21.09	45.32	15.38	21.47	7.88	1.02	14.95	5.21	2.12
32000	21.23	45.42	17.22	23.03	7.93	1.01	16.00	5.77	2.16
32500	21.30	45.54	18.87	22.54	8.02	1.00	15.76	5.47	2.11
33000	21.32	45.16	21.41	20.02	7.68	0.99	16.12	6.17	2.18
33500	21.28	44.97	24.47	16.59	7.48	0.98	16.07	6.43	2.14
34000	21.26	43.25	21.76	14.06	6.05	0.96	17.48	7.12	2.16
34500	21.30	44.68	14.33	10.62	6.58	0.93	17.85	8.10	2.15
35000	20.94	46.16	12.39	8.58	7.52	0.90	16.82	7.87	1.91
35500	20.67	45.49	10.08	6.99	6.41	0.86	16.89	7.66	2.13
36000	20.20	45.80	9.95	6.39	6.68	0.84	16.85	7.68	2.15
36500	20.09	47.15	10.69	6.07	7.79	0.81	17.12	7.86	2.15
37000	20.17	46.75	11.20	5.97	7.36	0.80	16.74	7.54	2.04
37500	20.25	47.47	11.58	5.88	7.92	0.79	16.85	7.85	1.99
38000	19.93	49.37	11.63	5.87	10.22	0.79	16.95	8.92	2.22
38500	19.14	47.09	10.85	6.09	8.63	0.82	16.63	9.17	2.13
39000	19.22	46.50	9.82	5.87	7.62	0.82	16.44	8.29	2.11
39500	19.42	47.03	9.56	5.38	7.47	0.80	16.02	9.03	2.27
40000	19.30	49.74	10.14	5.49	10.67	0.79	16.44	8.97	2.31
40500	18.86	51.75	9.12	5.91	14.28	0.84	17.33	9.89	2.37
41000	18.14	54.84	7.50	6.68	21.95	0.93	17.62	9.88	2.43
41500	17.29	56.94	6.32	7.54	30.17	1.02	18.64	10.29	2.57
42000	16.47	62.19	5.89	8.21	60.67	1.07	19.51	10.48	2.70
42500	15.59	63.34	5.93	8.08	76.61	1.06	18.98	10.36	2.59
43000	14.67	66.09	6.49	7.49	118.55	1.01	18.87	10.08	2.53
43500	13.62	71.15	7.35	6.54	238.61	0.92	19.12	9.94	2.58

## 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: Vd = 4.00V, Id = 27mA @ Temperature = +85°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output	1dB Comp. Output	Noise Figure
					K	Measure			
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dB)
20000	13.56	56.28	5.00	12.76	44.32	1.25	10.04	-0.36	5.42
20500	14.32	54.89	5.95	12.03	37.39	1.17	9.61	-0.23	5.03
21000	14.96	53.36	6.97	11.76	31.12	1.12	10.02	-0.06	4.81
21500	15.43	52.89	8.11	11.94	29.62	1.08	9.99	0.22	4.54
22000	15.74	53.51	9.29	12.16	32.14	1.05	11.17	0.62	4.41
22500	15.96	53.40	10.15	12.40	31.77	1.03	11.22	0.62	4.26
23000	16.18	52.72	10.91	12.74	29.28	1.02	11.37	1.00	4.21
23500	16.37	52.06	12.09	12.94	27.17	1.01	10.95	0.90	4.20
24000	16.56	51.53	13.51	12.97	25.47	0.99	10.80	1.01	4.10
24500	16.73	50.47	15.13	12.61	22.31	0.97	11.42	1.13	4.06
25000	16.87	49.54	17.13	12.69	19.98	0.96	11.17	1.14	4.00
25500	17.00	48.97	19.43	13.14	18.70	0.96	10.90	1.50	3.93
26000	17.11	48.56	19.30	13.76	17.72	0.97	11.64	1.63	3.86
26500	17.20	47.61	18.36	14.80	15.83	0.98	12.20	1.89	3.79
27000	17.28	47.11	17.61	15.35	14.82	0.99	12.51	1.95	3.77
27500	17.38	47.58	17.58	16.34	15.54	0.99	11.15	2.20	3.74
28000	17.48	45.68	17.96	16.80	12.41	0.99	12.78	2.37	3.78
28500	17.53	45.67	18.87	17.29	12.38	0.99	12.26	2.49	3.74
29000	17.58	45.35	19.04	17.04	11.85	0.99	12.82	2.79	3.78
29500	17.62	45.50	18.60	17.02	11.99	0.99	13.01	3.09	3.75
30000	17.63	45.21	17.57	16.87	11.53	1.00	13.55	3.31	3.80
30500	17.70	45.81	16.80	17.30	12.25	1.00	13.36	3.53	3.78
31000	17.80	45.90	16.55	17.86	12.24	1.00	14.11	3.84	3.78
31500	17.93	45.52	16.64	18.25	11.57	1.00	13.84	3.92	3.82
32000	18.06	45.48	17.69	20.65	11.48	1.01	14.69	4.37	3.85
32500	18.14	45.72	18.54	22.72	11.75	1.01	14.41	4.21	3.81
33000	18.17	45.71	19.86	21.49	11.73	1.00	15.04	4.69	3.84
33500	18.12	44.74	19.79	16.50	10.39	0.99	15.30	4.87	3.84
34000	18.17	43.49	16.69	13.59	8.69	0.97	16.12	5.10	3.92
34500	18.10	45.24	14.18	10.25	9.99	0.93	16.07	5.57	3.86
35000	17.94	46.06	13.26	8.82	10.62	0.90	15.86	5.17	3.93
35500	17.73	45.34	11.81	7.37	9.25	0.86	15.83	5.03	3.84
36000	17.56	46.36	12.11	7.06	10.41	0.85	14.89	4.81	3.79
36500	17.50	46.55	12.91	6.62	10.53	0.82	15.84	4.81	3.77
37000	17.53	47.59	13.17	6.35	11.63	0.81	14.64	4.55	3.82
37500	17.44	47.80	13.60	6.16	11.93	0.79	15.08	4.57	3.93
38000	17.02	48.33	13.93	6.25	13.44	0.79	15.31	4.81	4.02
38500	16.70	46.58	12.77	6.26	11.25	0.80	14.89	4.82	3.90
39000	16.83	46.89	11.81	5.93	11.01	0.80	15.22	5.09	3.93
39500	16.80	47.49	11.26	6.03	11.80	0.81	15.03	5.27	4.09
40000	16.49	48.96	10.85	6.36	14.72	0.84	15.02	5.64	4.01
40500	15.90	51.30	9.87	6.82	20.79	0.88	16.38	6.88	4.09
41000	15.19	52.49	8.78	7.28	25.72	0.92	16.97	7.02	4.24
41500	14.34	56.43	8.05	7.66	44.32	0.96	17.63	7.37	4.32
42000	13.50	60.21	7.69	7.79	74.74	0.98	17.49	7.29	4.35
42500	12.57	61.49	7.83	7.28	94.69	0.95	17.46	7.02	4.39
43000	11.60	69.27	8.28	7.50	267.76	0.94	17.26	6.48	4.43
43500	10.54	61.33	8.78	6.87	119.25	0.90	17.21	6.24	4.44

## 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: Vd = 4.00V, Id = 27mA @ Temperature = +85°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output	1dB Comp. Output	Noise Figure
					K	Measure			
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dB)
20000	13.25	57.46	4.94	12.78	52.28	1.25	9.62	-0.78	5.45
20500	14.02	54.50	5.88	12.06	36.82	1.18	9.15	-0.65	5.08
21000	14.66	53.74	6.88	11.79	33.47	1.12	9.49	-0.47	4.83
21500	15.13	52.56	8.01	11.97	29.39	1.08	9.58	-0.20	4.57
22000	15.44	53.17	9.16	12.19	31.84	1.05	10.74	0.20	4.44
22500	15.66	53.05	10.00	12.44	31.49	1.04	10.67	0.20	4.35
23000	15.88	52.45	10.76	12.78	29.30	1.02	10.82	0.58	4.24
23500	16.07	52.28	11.93	12.98	28.78	1.01	10.50	0.48	4.21
24000	16.26	51.12	13.33	13.01	25.11	0.99	10.34	0.49	4.13
24500	16.43	50.61	14.92	12.65	23.48	0.97	10.98	0.70	4.09
25000	16.57	49.33	16.89	12.73	20.20	0.96	10.70	0.71	4.00
25500	16.69	49.04	19.16	13.18	19.51	0.96	10.43	1.07	3.95
26000	16.80	48.11	19.13	13.78	17.43	0.97	11.11	1.19	3.89
26500	16.89	47.56	18.25	14.82	16.29	0.98	11.72	1.46	3.82
27000	16.97	47.12	17.54	15.34	15.36	0.99	12.04	1.52	3.79
27500	17.07	46.84	17.51	16.36	14.80	0.99	10.70	1.77	3.77
28000	17.18	45.80	17.91	16.82	13.03	0.99	12.22	1.95	3.76
28500	17.23	45.47	18.86	17.27	12.53	0.99	11.81	2.07	3.72
29000	17.29	45.38	19.08	16.99	12.31	0.99	12.33	2.28	3.84
29500	17.33	44.93	18.68	16.92	11.60	0.99	12.40	2.67	3.78
30000	17.35	44.86	17.61	16.74	11.43	0.99	12.96	2.91	3.82
30500	17.42	45.26	16.81	17.20	11.86	1.00	12.96	3.13	3.80
31000	17.54	45.34	16.52	17.69	11.82	1.00	13.46	3.54	3.80
31500	17.67	45.45	16.62	18.05	11.81	1.00	13.27	3.54	3.84
32000	17.81	45.17	17.64	20.34	11.39	1.01	14.31	3.89	3.90
32500	17.90	45.46	18.47	22.21	11.72	1.01	14.24	3.84	3.84
33000	17.94	44.99	19.76	21.08	11.07	1.00	14.40	4.23	3.92
33500	17.90	44.55	19.70	16.34	10.41	0.98	14.52	4.51	3.87
34000	17.96	43.19	16.70	13.46	8.59	0.97	15.40	4.75	3.86
34500	17.89	45.10	14.21	10.14	10.04	0.93	15.60	5.13	3.91
35000	17.74	45.68	13.28	8.70	10.37	0.90	15.11	4.83	3.85
35500	17.53	45.07	11.83	7.27	9.11	0.86	15.12	4.60	3.88
36000	17.36	45.78	12.11	6.95	9.90	0.84	14.57	4.48	3.84
36500	17.30	46.66	12.94	6.52	10.83	0.82	14.81	4.47	3.91
37000	17.33	47.00	13.20	6.24	11.03	0.80	14.46	4.22	3.69
37500	17.25	47.81	13.65	6.06	12.12	0.79	14.64	4.25	3.74
38000	16.84	48.03	13.96	6.16	13.17	0.79	14.65	4.52	3.92
38500	16.51	46.88	12.80	6.16	11.83	0.80	14.10	4.61	3.95
39000	16.63	45.98	11.84	5.84	10.07	0.79	14.43	4.79	3.87
39500	16.60	47.12	11.34	5.94	11.50	0.81	14.58	5.17	3.91
40000	16.29	49.42	10.94	6.28	15.83	0.83	14.71	5.46	4.09
40500	15.70	50.52	9.96	6.75	19.40	0.87	15.86	6.70	4.17
41000	14.99	54.27	8.84	7.22	32.30	0.92	15.97	6.85	4.28
41500	14.14	56.66	8.13	7.61	46.59	0.96	16.45	7.25	4.33
42000	13.30	58.87	7.76	7.75	65.57	0.97	17.11	7.19	4.38
42500	12.37	60.96	7.91	7.26	91.25	0.94	16.71	6.90	4.45
43000	11.40	61.97	8.36	7.49	118.33	0.94	16.62	6.37	4.48
43500	10.35	60.81	8.85	6.85	115.04	0.90	16.63	5.99	4.51



## 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: Vd = 4.00V, Id = 27mA @ Temperature = +85°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output	1dB Comp. Output	Noise Figure
					K	Measure			
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dB)
20000	13.79	57.10	5.08	12.72	47.77	1.24	10.68	0.11	5.38
20500	14.55	54.70	6.04	12.01	35.85	1.17	10.20	0.14	4.99
21000	15.19	54.14	7.07	11.75	33.31	1.11	10.56	0.32	4.72
21500	15.66	53.20	8.22	11.92	30.04	1.07	10.62	0.60	4.52
22000	15.96	52.96	9.41	12.13	29.49	1.04	11.81	0.99	4.36
22500	16.19	53.65	10.27	12.37	31.95	1.03	11.67	1.08	4.26
23000	16.40	52.90	11.05	12.72	29.22	1.02	11.87	1.36	4.18
23500	16.60	52.66	12.25	12.91	28.43	1.00	11.50	1.27	4.12
24000	16.79	51.37	13.70	12.95	24.39	0.99	11.44	1.38	4.08
24500	16.96	50.79	15.35	12.58	22.57	0.97	12.06	1.50	3.98
25000	17.10	49.66	17.41	12.66	19.74	0.96	11.72	1.60	3.99
25500	17.23	49.08	19.75	13.10	18.43	0.96	11.50	1.87	3.89
26000	17.34	48.44	19.50	13.70	17.02	0.97	12.26	2.09	3.83
26500	17.43	47.78	18.45	14.74	15.72	0.98	12.80	2.27	3.79
27000	17.51	47.53	17.65	15.29	15.14	0.99	13.05	2.42	3.76
27500	17.61	46.55	17.61	16.33	13.45	0.99	11.76	2.58	3.73
28000	17.70	45.75	18.01	16.82	12.19	0.99	13.02	2.73	3.67
28500	17.75	45.79	18.96	17.34	12.25	0.99	12.63	2.85	3.71
29000	17.79	45.59	19.09	17.08	11.90	0.99	13.39	3.15	3.78
29500	17.83	45.08	18.66	17.08	11.17	0.99	13.34	3.44	3.72
30000	17.83	45.55	17.58	16.92	11.73	1.00	14.07	3.76	3.76
30500	17.89	45.58	16.80	17.41	11.67	1.00	14.14	3.97	3.79
31000	17.99	45.85	16.57	17.99	11.92	1.00	14.58	4.27	3.76
31500	18.11	45.46	16.70	18.40	11.27	1.00	14.58	4.35	3.79
32000	18.23	45.50	17.78	20.90	11.30	1.01	14.92	4.69	3.84
32500	18.30	45.69	18.67	23.11	11.51	1.01	15.26	4.52	3.82
33000	18.32	45.66	19.96	21.88	11.47	1.00	15.51	5.01	3.87
33500	18.27	45.18	19.84	16.74	10.76	0.99	15.83	5.26	3.78
34000	18.32	43.60	16.64	13.74	8.66	0.97	16.25	5.50	3.80
34500	18.23	45.67	14.15	10.39	10.36	0.94	16.61	5.87	3.85
35000	18.07	46.36	13.24	8.94	10.87	0.91	16.57	5.56	3.71
35500	17.85	45.56	11.79	7.48	9.39	0.87	16.41	5.31	3.82
36000	17.69	46.42	12.12	7.16	10.40	0.85	15.90	5.10	3.77
36500	17.63	47.10	12.96	6.73	11.14	0.83	15.86	5.18	4.10
37000	17.66	47.42	13.21	6.46	11.33	0.81	15.35	4.94	3.76
37500	17.57	48.40	13.65	6.28	12.71	0.80	15.79	4.86	4.04
38000	17.15	48.34	13.93	6.38	13.38	0.80	15.64	4.98	3.65
38500	16.83	46.71	12.74	6.38	11.36	0.81	15.65	5.08	3.90
39000	16.96	46.34	11.75	6.04	10.26	0.81	15.73	5.35	3.94
39500	16.93	47.99	11.21	6.13	12.39	0.82	15.00	5.52	3.98
40000	16.62	49.82	10.78	6.44	16.11	0.84	15.27	5.78	3.89
40500	16.03	51.27	9.82	6.88	20.46	0.88	16.96	7.02	4.11
41000	15.32	54.78	8.73	7.35	33.07	0.93	16.80	7.17	4.17
41500	14.47	55.97	8.00	7.71	41.42	0.96	18.24	7.52	4.34
42000	13.63	61.14	7.64	7.83	81.90	0.98	17.31	7.44	4.33
42500	12.70	68.72	7.80	7.31	214.61	0.95	18.24	7.16	4.37
43000	11.72	66.69	8.25	7.53	195.99	0.95	18.35	6.62	4.43
43500	10.67	67.22	8.73	6.89	231.40	0.90	17.17	6.38	4.57