

## 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 = 5.00V, Id = 19.27mA @ 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)
10	15.30	18.80	17.18	14.38	1.07	0.49	18.64	6.01	5.15
50	15.45	18.73	18.15	14.74	1.06	0.48	17.36	5.09	4.87
100	15.46	18.75	18.13	14.70	1.06	0.48	18.19	5.61	4.67
200	15.28	18.93	17.06	15.23	1.08	0.53	17.19	4.99	4.70
300	15.26	18.96	16.89	15.23	1.08	0.54	17.55	5.12	4.81
400	15.40	18.85	17.29	14.32	1.07	0.50	17.52	5.33	4.70
500	15.29	18.96	16.67	14.65	1.08	0.53	16.92	4.81	4.79
600	15.18	19.08	15.96	14.71	1.09	0.56	17.50	4.97	4.81
700	15.30	18.97	15.93	13.50	1.08	0.52	17.68	5.14	4.82
800	15.18	19.09	15.38	13.61	1.09	0.54	17.39	4.95	4.81
900	15.18	19.10	14.84	12.83	1.09	0.53	17.54	4.95	4.82
1000	15.13	19.15	14.62	12.84	1.09	0.55	16.71	4.43	4.81
1500	14.96	19.35	13.03	11.20	1.10	0.55	16.03	3.94	5.00
2000	14.83	19.47	12.56	10.71	1.11	0.56	15.80	3.62	5.05
2500	14.75	19.53	12.75	10.77	1.12	0.57	16.11	3.68	5.07
3000	14.71	19.53	13.23	11.11	1.13	0.59	16.88	4.00	5.11
3500	14.70	19.53	13.74	11.39	1.13	0.60	15.97	3.60	5.12
4000	14.68	19.47	14.51	11.65	1.14	0.61	16.30	3.85	5.09
4500	14.69	19.44	15.71	12.09	1.14	0.62	16.60	4.18	5.02
5000	14.71	19.39	17.55	12.76	1.14	0.61	17.76	4.83	4.91
5500	14.71	19.31	20.35	13.97	1.15	0.63	18.64	5.49	4.91
6000	14.64	19.33	20.10	14.99	1.16	0.65	18.63	5.78	4.87
6500	14.55	19.36	19.40	15.43	1.17	0.67	18.21	6.25	4.86
7000	14.47	19.37	20.98	16.09	1.18	0.68	17.60	6.76	4.98
7500	14.39	19.38	22.71	17.19	1.19	0.70	17.12	7.15	5.05
8000	14.29	19.42	21.25	19.02	1.20	0.73	16.25	6.81	5.14
8500	14.20	19.43	18.03	20.40	1.21	0.76	15.19	5.51	5.14
9000	14.05	19.55	16.15	20.33	1.23	0.79	14.76	5.04	5.30
9500	13.92	19.59	16.10	17.88	1.24	0.76	14.08	4.33	5.29
10000	13.80	19.60	17.36	15.12	1.25	0.73	13.50	4.11	5.27
10500	13.68	19.66	19.21	12.79	1.26	0.72	12.84	3.75	5.24
11000	13.55	19.62	21.02	11.38	1.24	0.73	12.40	3.04	5.21
11500	13.43	19.57	19.04	11.19	1.24	0.75	11.61	2.44	5.19
12000	13.27	19.50	15.10	11.96	1.25	0.77	11.60	2.17	5.19
12500	12.92	19.51	12.35	12.58	1.29	0.80	11.10	1.40	5.26
13000	12.46	19.60	10.92	11.70	1.34	0.82	10.86	0.81	5.42
13500	11.86	19.85	10.50	10.32	1.41	0.82	10.75	0.38	5.57
14000	11.20	20.01	11.29	9.60	1.50	0.78	10.86	0.31	5.67
14500	10.63	20.09	11.89	9.43	1.59	0.76	10.88	0.63	5.84
15000	10.22	19.97	12.43	9.53	1.65	0.75	11.04	0.64	6.08
15500	9.80	19.86	13.22	9.77	1.73	0.79	10.90	0.65	6.26
16000	9.37	19.72	13.92	10.05	1.80	0.85	10.90	0.47	6.24
16500	9.02	19.58	13.77	10.34	1.87	0.90	10.26	0.35	6.20
17000	8.50	19.65	12.60	10.60	1.95	0.91	9.98	-0.05	6.06
17500	7.97	19.71	12.39	10.95	2.06	0.90	9.25	-0.76	6.13
18000	7.47	19.88	13.46	11.40	2.24	0.88	8.68	-1.47	6.33

## 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 = 4.75V, Id = 14.98mA @ 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)
10	14.34	18.31	14.14	11.84	1.07	0.50	14.67	1.93	5.13
50	14.47	18.25	14.62	12.02	1.07	0.49	13.56	1.12	4.84
100	14.48	18.26	14.63	11.95	1.07	0.49	14.25	1.60	4.69
200	14.30	18.45	13.96	12.48	1.09	0.54	13.32	1.00	4.73
300	14.28	18.49	13.85	12.49	1.09	0.55	13.66	1.14	4.75
400	14.42	18.36	14.13	11.73	1.08	0.51	13.63	1.35	4.72
500	14.31	18.49	13.71	12.07	1.09	0.54	13.19	0.88	4.74
600	14.19	18.63	13.24	12.20	1.10	0.57	13.72	1.00	4.80
700	14.31	18.51	13.25	11.22	1.09	0.53	13.85	1.19	4.80
800	14.19	18.64	12.84	11.37	1.10	0.55	13.63	0.99	4.80
900	14.17	18.66	12.48	10.77	1.10	0.54	13.75	0.96	4.80
1000	14.12	18.71	12.31	10.78	1.10	0.55	13.14	0.49	4.83
1500	13.93	18.95	11.14	9.56	1.11	0.55	12.48	-0.03	4.98
2000	13.80	19.09	10.78	9.21	1.12	0.56	12.37	-0.32	5.06
2500	13.73	19.14	10.92	9.27	1.13	0.57	12.45	-0.25	5.07
3000	13.71	19.11	11.29	9.54	1.14	0.59	12.83	0.05	5.07
3500	13.72	19.09	11.66	9.80	1.15	0.60	12.11	-0.26	5.09
4000	13.74	19.01	12.24	10.04	1.15	0.61	12.20	-0.01	5.07
4500	13.79	18.95	13.10	10.45	1.15	0.61	12.60	0.36	4.98
5000	13.87	18.83	14.54	11.09	1.15	0.60	13.55	1.07	4.89
5500	13.94	18.68	17.33	12.51	1.15	0.61	14.95	1.81	4.95
6000	13.94	18.64	19.56	14.28	1.16	0.64	15.49	2.29	4.82
6500	13.88	18.63	21.53	15.93	1.17	0.67	16.25	2.82	4.86
7000	13.81	18.65	26.53	17.64	1.18	0.68	17.59	3.40	4.95
7500	13.72	18.68	38.07	20.08	1.20	0.71	19.05	3.93	5.00
8000	13.59	18.75	22.45	23.94	1.21	0.74	18.48	3.79	5.10
8500	13.45	18.81	17.60	26.71	1.22	0.78	16.53	2.35	5.11
9000	13.27	18.93	15.51	24.77	1.24	0.80	16.49	2.20	5.25
9500	13.11	18.99	15.45	20.49	1.26	0.79	16.02	1.80	5.23
10000	12.98	19.00	16.68	16.66	1.27	0.76	16.52	2.05	5.21
10500	12.85	19.04	17.84	13.75	1.27	0.76	15.90	2.06	5.17
11000	12.70	19.01	17.60	11.91	1.26	0.77	15.16	1.57	5.15
11500	12.55	18.98	15.26	11.22	1.25	0.77	14.08	1.04	5.13
12000	12.33	18.97	12.38	11.29	1.25	0.79	14.08	1.06	5.10
12500	11.91	19.04	10.42	11.09	1.30	0.82	13.42	0.53	5.20
13000	11.40	19.19	9.41	10.15	1.35	0.83	13.10	0.13	5.31
13500	10.79	19.46	9.21	9.20	1.43	0.82	13.07	-0.03	5.45
14000	10.18	19.62	9.95	8.86	1.54	0.79	12.98	0.22	5.57
14500	9.68	19.68	10.51	8.91	1.63	0.76	12.64	0.61	5.77
15000	9.33	19.54	11.08	9.16	1.69	0.76	12.36	0.75	5.93
15500	8.98	19.40	11.82	9.48	1.76	0.80	11.81	0.78	6.12
16000	8.65	19.22	12.64	9.87	1.83	0.87	11.43	0.50	6.14
16500	8.37	19.03	12.71	10.44	1.87	0.91	10.45	0.52	6.05
17000	7.92	19.06	12.01	11.00	1.95	0.92	10.01	-0.20	5.88
17500	7.44	19.10	12.00	11.68	2.07	0.91	9.29	-0.84	5.94
18000	6.94	19.28	12.95	12.41	2.24	0.90	8.83	-1.70	6.18

## 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 = 5.25V, Id = 23.55mA @ 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)
10	15.80	19.07	19.42	16.05	1.06	0.49	22.24	8.91	5.20
50	15.95	19.01	20.94	16.69	1.06	0.48	20.67	7.96	4.91
100	15.95	19.02	20.92	16.66	1.06	0.48	21.55	8.48	4.73
200	15.79	19.20	19.37	17.18	1.07	0.52	20.47	7.86	4.78
300	15.77	19.23	19.13	17.17	1.07	0.53	20.89	7.96	4.73
400	15.89	19.12	19.66	16.14	1.06	0.50	20.79	8.20	4.76
500	15.79	19.23	18.83	16.47	1.07	0.52	20.17	7.67	4.81
600	15.68	19.34	17.89	16.46	1.08	0.55	20.79	7.82	4.82
700	15.80	19.23	17.82	15.07	1.07	0.51	20.96	7.97	4.83
800	15.69	19.34	17.11	15.16	1.08	0.54	20.63	7.81	4.85
900	15.69	19.34	16.42	14.22	1.08	0.53	20.75	7.80	4.89
1000	15.65	19.39	16.16	14.24	1.08	0.54	19.92	7.26	4.86
1500	15.49	19.56	14.21	12.26	1.09	0.54	19.13	6.79	5.04
2000	15.36	19.68	13.67	11.65	1.10	0.55	18.75	6.45	5.10
2500	15.26	19.74	13.87	11.67	1.11	0.57	18.86	6.52	5.09
3000	15.19	19.74	14.44	12.01	1.12	0.58	19.47	6.80	5.15
3500	15.15	19.75	15.04	12.27	1.13	0.60	18.31	6.38	5.16
4000	15.10	19.70	16.00	12.49	1.13	0.61	18.30	6.63	5.14
4500	15.07	19.67	17.42	12.85	1.14	0.62	18.02	6.88	5.06
5000	15.05	19.65	19.64	13.31	1.14	0.62	18.51	7.45	4.99
5500	14.99	19.60	22.21	14.09	1.15	0.63	18.57	8.01	5.01
6000	14.90	19.63	20.01	14.45	1.16	0.65	18.06	8.11	4.92
6500	14.77	19.65	18.59	14.40	1.17	0.67	17.37	8.38	4.96
7000	14.70	19.64	19.40	14.81	1.17	0.67	16.79	8.52	5.05
7500	14.62	19.61	20.17	15.70	1.18	0.69	16.30	8.35	5.10
8000	14.54	19.60	19.12	17.36	1.19	0.72	15.49	7.73	5.22
8500	14.45	19.58	16.97	18.89	1.19	0.76	14.44	6.65	5.21
9000	14.30	19.67	15.43	19.47	1.21	0.78	13.87	6.04	5.37
9500	14.15	19.72	15.44	17.65	1.23	0.76	13.12	5.24	5.34
10000	14.01	19.72	16.58	15.14	1.24	0.72	12.56	4.79	5.34
10500	13.87	19.77	18.37	12.95	1.25	0.72	11.95	4.30	5.30
11000	13.73	19.73	20.64	11.66	1.24	0.73	11.55	3.57	5.23
11500	13.59	19.66	19.55	11.62	1.25	0.75	10.74	2.91	5.25
12000	13.41	19.58	15.72	12.54	1.26	0.77	10.71	2.48	5.26
12500	13.07	19.58	12.79	13.09	1.30	0.80	10.20	1.76	5.35
13000	12.57	19.67	11.31	11.84	1.34	0.82	10.02	1.10	5.50
13500	11.94	19.92	10.92	10.24	1.41	0.81	9.91	0.73	5.64
14000	11.27	20.08	11.71	9.41	1.50	0.77	10.08	0.60	5.76
14500	10.71	20.16	12.24	9.22	1.58	0.75	10.12	0.78	5.99
15000	10.30	20.03	12.94	9.31	1.65	0.74	10.29	0.75	6.16
15500	9.85	19.92	13.67	9.58	1.73	0.78	10.27	0.74	6.34
16000	9.45	19.76	14.43	9.89	1.80	0.84	10.32	0.56	6.38
16500	9.09	19.62	14.11	10.16	1.86	0.89	9.73	0.48	6.32
17000	8.57	19.67	12.80	10.43	1.94	0.90	9.56	-0.06	6.21
17500	8.06	19.73	12.50	10.76	2.06	0.89	8.88	-0.56	6.28
18000	7.58	19.89	13.54	11.26	2.22	0.88	8.21	-1.40	6.41

## 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: Vd = 5.00V, Id = 15.55mA @ 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)
10	14.91	18.58	15.53	12.89	1.07	0.49	14.38	2.12	4.12
50	15.02	18.51	15.89	13.02	1.06	0.48	13.27	1.29	3.85
100	15.02	18.53	15.57	12.68	1.06	0.48	14.01	1.76	3.74
200	14.92	18.65	14.80	12.66	1.07	0.50	13.19	1.26	3.79
300	14.93	18.66	15.14	13.11	1.07	0.51	13.57	1.46	3.80
400	15.02	18.58	15.84	13.06	1.07	0.49	13.56	1.65	3.73
500	14.86	18.75	15.26	13.75	1.09	0.54	12.92	1.05	3.78
600	14.78	18.84	14.54	13.20	1.09	0.55	13.43	1.22	3.81
700	14.92	18.72	14.56	12.13	1.07	0.51	13.62	1.40	3.83
800	14.74	18.90	13.73	12.24	1.09	0.55	13.27	1.12	3.81
900	14.81	18.84	13.44	11.41	1.08	0.52	13.51	1.21	3.85
1000	14.69	18.96	13.18	11.74	1.09	0.55	12.70	0.62	3.86
1500	14.62	19.07	12.23	10.37	1.09	0.53	12.19	0.28	4.00
2000	14.45	19.25	11.58	9.89	1.11	0.55	11.96	-0.07	4.01
2500	14.40	19.29	11.51	9.66	1.11	0.55	12.08	0.00	4.03
3000	14.38	19.26	11.75	9.85	1.11	0.56	12.65	0.30	4.05
3500	14.40	19.23	12.32	10.20	1.12	0.58	11.63	-0.13	4.09
4000	14.44	19.12	13.45	10.82	1.12	0.58	11.93	0.23	4.06
4500	14.44	19.11	13.86	10.91	1.12	0.58	12.09	0.46	3.96
5000	14.52	19.00	15.60	11.80	1.12	0.58	12.94	1.04	3.88
5500	14.59	18.86	18.35	13.56	1.13	0.60	14.43	1.90	3.86
6000	14.59	18.82	18.81	15.59	1.13	0.63	14.99	2.34	3.78
6500	14.51	18.85	18.91	16.43	1.14	0.64	15.57	2.93	3.82
7000	14.48	18.86	22.72	17.40	1.15	0.65	16.62	3.40	3.91
7500	14.40	18.88	27.24	18.58	1.16	0.67	18.35	4.02	3.90
8000	14.31	18.94	23.66	19.07	1.17	0.70	18.32	3.88	3.98
8500	14.25	18.97	20.34	19.25	1.17	0.72	16.53	2.79	3.92
9000	14.16	19.03	17.58	19.99	1.18	0.73	16.25	2.64	4.05
9500	14.09	19.06	16.46	18.47	1.19	0.71	15.33	2.13	4.08
10000	14.01	19.06	17.46	15.25	1.19	0.69	16.01	2.49	4.07
10500	13.92	19.15	18.94	12.25	1.19	0.69	15.84	2.14	4.01
11000	13.84	19.13	18.60	10.96	1.17	0.69	15.89	1.90	3.98
11500	13.80	19.06	15.96	10.94	1.16	0.69	14.46	1.10	3.98
12000	13.77	18.91	14.19	12.43	1.16	0.71	15.00	1.47	3.91
12500	13.58	18.81	13.53	14.33	1.18	0.75	14.69	1.18	3.94
13000	13.15	18.93	11.98	14.18	1.23	0.79	14.20	0.81	4.09
13500	12.51	19.29	9.92	10.98	1.29	0.77	14.53	0.77	4.26
14000	11.79	19.58	9.78	9.07	1.35	0.70	15.12	0.88	4.32
14500	11.19	19.73	10.82	8.23	1.42	0.68	15.45	1.51	4.48
15000	10.88	19.58	12.90	8.48	1.47	0.71	15.08	1.87	4.58
15500	10.52	19.44	12.52	9.22	1.54	0.80	14.06	2.17	4.71
16000	10.17	19.30	11.40	9.91	1.59	0.88	13.26	1.88	4.81
16500	9.80	19.12	11.68	9.96	1.63	0.85	11.76	1.73	4.80
17000	9.46	18.99	13.06	10.28	1.70	0.81	11.37	1.10	4.62
17500	8.92	19.12	12.84	9.84	1.76	0.79	9.87	0.40	4.44
18000	8.25	19.42	10.99	9.48	1.87	0.80	9.32	-0.49	4.56

## 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 = 4.75V, Id = 11.50mA @ 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)
10	12.63	17.53	10.74	8.47	1.08	0.48	16.90	-4.38	4.21
50	12.75	17.57	10.86	8.79	1.09	0.49	20.97	-4.99	3.99
100	12.73	17.57	10.67	8.51	1.08	0.48	17.50	-4.65	3.89
200	12.61	17.70	10.29	8.57	1.10	0.51	17.29	-5.14	3.94
300	12.63	17.70	10.49	8.85	1.10	0.52	16.79	-4.90	4.00
400	12.75	17.60	10.86	8.73	1.09	0.50	16.59	-4.71	3.89
500	12.57	17.81	10.58	9.36	1.12	0.56	25.17	-5.19	3.90
600	12.48	17.93	10.23	9.14	1.12	0.57	20.29	-5.11	3.95
700	12.61	17.80	10.24	8.32	1.10	0.51	19.26	-4.94	3.93
800	12.41	18.02	9.78	8.58	1.12	0.56	19.06	-5.18	3.94
900	12.47	17.97	9.64	7.99	1.11	0.52	18.08	-5.14	3.99
1000	12.34	18.09	9.50	8.26	1.13	0.56	16.13	-5.56	3.99
1500	12.24	18.28	8.99	7.47	1.13	0.54	15.73	-5.97	4.17
2000	12.05	18.50	8.61	7.25	1.14	0.55	13.59	-6.34	4.16
2500	12.01	18.53	8.55	7.07	1.14	0.55	13.89	-6.36	4.16
3000	12.04	18.44	8.68	7.12	1.14	0.55	15.20	-6.20	4.21
3500	12.14	18.37	8.98	7.37	1.14	0.57	13.58	-6.47	4.19
4000	12.27	18.19	9.65	7.78	1.14	0.57	16.77	-6.25	4.18
4500	12.36	18.15	9.87	7.94	1.14	0.56	16.71	-6.00	4.05
5000	12.57	17.84	10.82	8.35	1.12	0.53	18.54	-5.42	3.96
5500	12.83	17.51	12.76	9.84	1.11	0.54	16.07	-4.66	3.96
6000	13.01	17.31	14.64	12.07	1.12	0.58	16.48	-4.20	3.87
6500	13.03	17.28	16.24	14.65	1.13	0.63	16.02	-3.64	3.88
7000	12.98	17.36	17.52	16.65	1.15	0.66	14.65	-3.37	3.98
7500	12.91	17.37	20.26	21.11	1.16	0.68	14.19	-2.92	4.02
8000	12.81	17.51	20.72	31.94	1.18	0.71	14.60	-3.04	4.06
8500	12.70	17.69	18.02	26.72	1.20	0.74	14.43	-4.01	3.98
9000	12.54	17.80	15.15	20.76	1.21	0.76	14.90	-3.91	4.13
9500	12.45	17.90	14.01	18.21	1.22	0.75	16.30	-4.19	4.10
10000	12.39	17.86	14.64	15.62	1.21	0.74	17.60	-3.75	4.09
10500	12.33	17.99	15.41	12.39	1.20	0.74	16.86	-3.99	4.03
11000	12.22	18.01	13.67	10.25	1.16	0.73	15.81	-4.26	4.00
11500	12.17	18.00	11.53	9.30	1.13	0.71	12.81	-4.98	3.99
12000	12.14	17.88	10.10	9.73	1.11	0.74	13.50	-4.54	3.94
12500	11.98	17.80	9.60	10.40	1.13	0.78	12.24	-4.54	3.92
13000	11.58	17.99	8.66	10.29	1.18	0.82	12.01	-4.56	4.07
13500	10.91	18.48	7.47	8.81	1.26	0.77	11.21	-4.36	4.23
14000	10.35	18.75	7.51	7.90	1.34	0.71	10.74	-3.29	4.33
14500	9.90	18.85	8.38	7.67	1.41	0.69	11.22	-1.79	4.44
15000	9.78	18.62	9.93	8.45	1.45	0.74	11.47	-0.53	4.59
15500	9.54	18.46	9.93	9.55	1.51	0.85	11.57	0.79	4.67
16000	9.26	18.37	9.28	10.39	1.54	0.93	11.72	0.59	4.75
16500	8.97	18.15	9.60	10.46	1.57	0.87	10.21	1.02	4.77
17000	8.77	17.94	11.01	11.32	1.63	0.83	9.98	0.29	4.54
17500	8.34	18.05	11.75	11.33	1.73	0.82	8.72	-0.22	4.45
18000	7.61	18.48	10.48	10.95	1.83	0.85	8.43	-1.17	4.56

## 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 = 5.25V, Id = 19.76mA @ 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)
10	15.71	19.02	18.64	15.40	1.06	0.49	19.28	6.25	4.19
50	15.83	18.94	19.41	15.66	1.06	0.47	17.70	5.33	3.88
100	15.84	18.97	18.93	15.27	1.06	0.47	18.53	5.82	3.77
200	15.74	19.07	17.73	15.15	1.06	0.49	17.62	5.30	3.79
300	15.74	19.09	18.22	15.74	1.07	0.50	18.13	5.49	3.79
400	15.83	19.02	19.23	15.74	1.06	0.49	18.05	5.67	3.74
500	15.67	19.18	18.35	16.47	1.08	0.53	17.29	5.07	3.77
600	15.60	19.26	17.30	15.64	1.08	0.54	17.87	5.24	3.85
700	15.74	19.13	17.30	14.36	1.07	0.50	18.09	5.42	3.78
800	15.57	19.30	16.16	14.37	1.08	0.54	17.68	5.14	3.83
900	15.64	19.24	15.74	13.37	1.07	0.51	17.98	5.25	3.83
1000	15.53	19.35	15.42	13.73	1.08	0.54	16.98	4.62	3.85
1500	15.48	19.43	14.16	11.98	1.08	0.52	16.50	4.31	3.97
2000	15.31	19.59	13.31	11.31	1.10	0.54	16.23	3.94	4.03
2500	15.26	19.63	13.21	11.04	1.10	0.54	16.53	4.02	4.06
3000	15.23	19.62	13.53	11.29	1.11	0.56	17.48	4.33	4.04
3500	15.23	19.61	14.26	11.70	1.11	0.58	16.27	3.83	4.09
4000	15.24	19.53	15.67	12.42	1.11	0.59	16.85	4.21	4.07
4500	15.22	19.54	16.07	12.41	1.12	0.59	17.04	4.41	3.98
5000	15.24	19.49	18.02	13.41	1.12	0.59	18.20	4.95	3.90
5500	15.25	19.42	19.37	15.00	1.12	0.61	19.58	5.72	3.89
6000	15.20	19.45	17.37	16.19	1.13	0.64	20.02	6.05	3.82
6500	15.08	19.50	16.50	15.86	1.14	0.65	20.11	6.61	3.85
7000	15.06	19.49	18.70	16.36	1.15	0.65	19.94	7.11	3.94
7500	14.99	19.52	19.57	16.46	1.16	0.66	19.61	7.76	4.00
8000	14.91	19.59	18.69	16.21	1.16	0.69	18.73	7.63	4.02
8500	14.88	19.58	17.93	16.16	1.17	0.70	17.64	6.54	3.98
9000	14.84	19.62	17.00	16.91	1.17	0.71	17.22	6.25	4.13
9500	14.80	19.64	16.44	16.06	1.18	0.68	16.68	5.52	4.12
10000	14.74	19.65	17.13	13.55	1.18	0.66	15.87	5.59	4.13
10500	14.66	19.76	18.16	11.09	1.17	0.65	15.28	5.02	4.02
11000	14.63	19.73	20.00	10.20	1.15	0.65	14.67	4.55	4.05
11500	14.65	19.64	18.96	10.60	1.15	0.66	13.70	3.76	4.04
12000	14.67	19.45	17.58	12.60	1.15	0.68	13.61	3.83	4.01
12500	14.52	19.34	16.88	15.71	1.17	0.71	13.00	3.35	4.01
13000	14.17	19.38	14.58	17.10	1.21	0.76	12.49	2.65	4.16
13500	13.60	19.65	11.67	12.77	1.26	0.75	12.64	2.28	4.33
14000	12.87	19.93	11.18	10.01	1.32	0.70	12.55	1.95	4.40
14500	12.22	20.10	12.25	8.75	1.37	0.68	12.63	2.12	4.60
15000	11.83	19.97	14.70	8.72	1.42	0.70	12.62	2.22	4.69
15500	11.37	19.85	13.63	9.28	1.49	0.77	12.49	2.33	4.79
16000	10.99	19.73	12.21	9.92	1.55	0.85	12.45	2.18	4.87
16500	10.55	19.53	12.68	9.92	1.60	0.83	11.53	1.97	4.89
17000	10.14	19.47	13.94	10.02	1.67	0.80	11.38	1.44	4.65
17500	9.45	19.71	12.32	9.16	1.74	0.78	10.08	0.67	4.57
18000	8.80	20.00	10.53	8.66	1.85	0.77	9.48	-0.01	4.70

## 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 = 5.00V, Id = 22.49mA @ 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)
10	15.46	18.87	17.97	15.12	1.06	0.49	21.49	8.48	5.81
50	15.61	18.82	19.52	15.71	1.06	0.49	20.01	7.48	5.71
100	15.62	18.82	19.93	15.99	1.06	0.49	20.86	8.04	5.53
200	15.36	19.09	18.69	17.76	1.09	0.56	19.71	7.26	5.54
300	15.37	19.09	18.44	17.22	1.09	0.55	20.18	7.48	5.50
400	15.53	18.94	18.40	15.26	1.07	0.51	20.10	7.73	5.51
500	15.44	19.03	17.46	15.20	1.08	0.53	19.51	7.25	5.60
600	15.35	19.13	16.74	15.26	1.09	0.55	20.17	7.42	5.61
700	15.41	19.08	16.28	14.05	1.08	0.53	20.22	7.48	5.63
800	15.33	19.16	15.72	13.91	1.08	0.54	19.95	7.25	5.64
900	15.26	19.23	14.92	13.27	1.09	0.55	19.96	7.18	5.67
1000	15.26	19.23	14.65	12.93	1.09	0.54	19.23	6.72	5.68
1500	15.06	19.43	13.13	11.55	1.10	0.56	18.48	6.26	5.84
2000	14.95	19.50	13.09	11.29	1.11	0.57	18.19	5.97	5.92
2500	14.83	19.56	13.47	11.52	1.12	0.58	18.42	6.06	5.90
3000	14.70	19.59	13.52	11.50	1.13	0.60	18.88	6.26	6.00
3500	14.57	19.64	13.57	11.39	1.15	0.62	17.84	5.87	6.02
4000	14.50	19.60	14.42	11.64	1.16	0.63	17.68	6.08	6.00
4500	14.47	19.51	16.25	12.12	1.16	0.64	17.47	6.29	5.88
5000	14.43	19.46	18.79	12.37	1.16	0.64	17.97	6.98	5.81
5500	14.35	19.38	23.15	12.73	1.17	0.64	17.74	7.43	5.80
6000	14.23	19.36	24.58	12.97	1.18	0.66	17.10	7.46	5.76
6500	14.10	19.32	23.62	13.49	1.19	0.68	16.27	7.48	5.80
7000	13.99	19.25	26.01	14.77	1.20	0.69	15.51	7.28	5.93
7500	13.88	19.18	23.81	17.24	1.21	0.72	14.90	6.82	6.01
8000	13.71	19.17	17.84	20.91	1.22	0.77	14.11	6.06	6.15
8500	13.48	19.19	15.36	23.46	1.23	0.81	13.12	5.04	6.09
9000	13.20	19.31	14.83	23.45	1.27	0.84	12.53	4.37	6.25
9500	12.94	19.38	15.89	20.17	1.31	0.83	11.84	3.62	6.26
10000	12.66	19.40	17.31	17.21	1.35	0.80	11.33	3.00	6.47
10500	12.39	19.47	17.82	14.79	1.37	0.79	10.82	2.61	6.30
11000	12.14	19.42	17.07	13.29	1.37	0.81	10.44	1.88	6.26
11500	11.87	19.39	15.18	12.53	1.39	0.82	9.90	1.35	6.26
12000	11.53	19.37	13.13	12.15	1.42	0.83	9.96	0.87	6.21
12500	10.99	19.48	11.25	10.93	1.47	0.83	9.60	0.22	6.33
13000	10.31	19.72	10.07	9.52	1.55	0.84	9.46	-0.24	6.50
13500	9.67	19.94	10.20	8.76	1.65	0.85	9.12	-0.57	6.60
14000	9.13	19.97	11.10	8.95	1.76	0.86	9.33	-0.49	6.79
14500	8.67	19.91	11.55	9.49	1.87	0.84	9.33	-0.38	7.02
15000	8.26	19.83	11.61	9.77	1.96	0.81	9.56	-0.27	7.28
15500	7.81	19.80	12.24	9.53	2.05	0.80	9.51	-0.42	7.54
16000	7.43	19.67	14.43	9.33	2.14	0.82	9.52	-0.59	7.48
16500	7.07	19.50	14.64	9.61	2.20	0.87	9.05	-0.76	7.38
17000	6.52	19.63	11.30	10.24	2.31	0.94	8.66	-1.14	7.28
17500	6.03	19.75	10.17	11.97	2.48	1.01	8.45	-1.71	7.61
18000	5.55	19.82	11.13	15.22	2.71	1.03	7.74	-2.57	8.02

## 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 = 4.75V, Id = 18.28mA @ 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)
10	14.85	18.56	15.85	13.33	1.07	0.50	18.26	5.50	5.76
50	15.00	18.50	16.72	13.69	1.07	0.49	16.89	4.59	5.64
100	15.02	18.50	17.05	13.89	1.07	0.49	17.71	5.13	5.47
200	14.76	18.77	16.21	15.38	1.09	0.57	16.59	4.41	5.49
300	14.77	18.77	16.02	14.94	1.09	0.56	17.01	4.56	5.46
400	14.93	18.63	16.03	13.35	1.08	0.51	16.98	4.81	5.47
500	14.83	18.73	15.35	13.37	1.08	0.53	16.43	4.32	5.55
600	14.74	18.84	14.80	13.47	1.09	0.56	17.04	4.49	5.57
700	14.79	18.79	14.48	12.44	1.09	0.53	17.09	4.56	5.55
800	14.71	18.87	14.04	12.34	1.09	0.55	16.85	4.42	5.59
900	14.64	18.95	13.41	11.83	1.10	0.55	16.89	4.29	5.60
1000	14.63	18.96	13.19	11.55	1.10	0.55	16.18	3.84	5.66
1500	14.43	19.19	11.97	10.43	1.11	0.56	15.48	3.37	5.78
2000	14.34	19.27	11.99	10.29	1.12	0.57	15.27	3.13	5.84
2500	14.26	19.32	12.34	10.57	1.13	0.59	15.58	3.15	5.86
3000	14.17	19.36	12.40	10.61	1.14	0.60	16.09	3.33	5.89
3500	14.09	19.41	12.44	10.55	1.15	0.62	15.34	3.08	5.98
4000	14.07	19.36	13.20	10.87	1.16	0.63	15.51	3.21	5.93
4500	14.12	19.25	14.75	11.52	1.16	0.63	15.81	3.58	5.81
5000	14.14	19.18	16.76	12.06	1.16	0.63	16.93	4.37	5.70
5500	14.12	19.09	19.95	12.88	1.17	0.64	17.38	4.93	5.74
6000	14.05	19.08	21.87	13.71	1.18	0.66	17.14	5.24	5.67
6500	13.96	19.06	23.09	14.69	1.19	0.68	16.52	5.61	5.72
7000	13.86	19.05	27.53	16.26	1.20	0.69	15.80	5.92	5.83
7500	13.75	19.03	27.56	19.17	1.22	0.72	15.27	5.88	5.93
8000	13.58	19.06	18.99	23.47	1.23	0.76	14.51	5.38	6.03
8500	13.38	19.11	16.05	26.16	1.24	0.81	13.55	4.16	6.01
9000	13.14	19.24	15.35	24.31	1.28	0.84	13.08	3.55	6.16
9500	12.91	19.30	16.44	19.71	1.31	0.82	12.39	2.91	6.15
10000	12.67	19.33	17.79	16.35	1.34	0.79	11.92	2.42	6.20
10500	12.43	19.39	18.01	13.93	1.35	0.78	11.40	2.14	6.17
11000	12.22	19.34	16.89	12.54	1.34	0.80	11.02	1.39	6.11
11500	11.99	19.30	14.92	11.92	1.35	0.81	10.51	0.94	6.11
12000	11.67	19.27	12.87	11.79	1.37	0.82	10.58	0.59	6.06
12500	11.15	19.37	10.97	10.94	1.43	0.83	10.24	-0.11	6.16
13000	10.50	19.60	9.76	9.71	1.51	0.84	10.08	-0.55	6.33
13500	9.87	19.82	9.87	8.98	1.60	0.86	9.75	-0.93	6.39
14000	9.33	19.85	10.80	9.15	1.72	0.86	9.94	-0.69	6.57
14500	8.86	19.80	11.30	9.75	1.82	0.85	9.94	-0.56	6.83
15000	8.43	19.75	11.29	10.02	1.92	0.81	10.17	-0.46	7.07
15500	7.95	19.73	11.90	9.73	2.01	0.80	10.09	-0.51	7.32
16000	7.56	19.59	14.04	9.48	2.10	0.82	10.03	-0.69	7.28
16500	7.18	19.46	14.41	9.67	2.17	0.87	9.54	-0.91	7.15
17000	6.62	19.59	11.16	10.18	2.28	0.94	9.04	-1.23	7.01
17500	6.08	19.71	9.98	11.74	2.44	1.01	8.90	-1.75	7.32
18000	5.56	19.79	10.93	15.01	2.68	1.03	8.22	-2.71	7.74



## 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 = 5.25V, Id = 26.88mA @ 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)
10	15.82	19.07	19.99	16.39	1.06	0.49	24.52	10.71	5.87
50	15.97	19.02	21.93	17.29	1.06	0.48	22.56	9.74	5.77
100	15.98	19.03	22.46	17.65	1.06	0.48	23.42	10.31	5.59
200	15.73	19.28	20.69	19.55	1.08	0.55	22.27	9.59	5.62
300	15.74	19.28	20.31	18.91	1.08	0.54	22.72	9.75	5.58
400	15.89	19.14	20.19	16.70	1.06	0.50	22.61	9.97	5.59
500	15.81	19.22	19.02	16.64	1.07	0.52	22.03	9.46	5.70
600	15.71	19.32	18.12	16.68	1.08	0.54	22.78	9.69	5.70
700	15.78	19.26	17.47	15.26	1.07	0.52	22.87	9.73	5.69
800	15.70	19.33	16.79	15.06	1.08	0.53	22.63	9.60	5.72
900	15.63	19.39	15.84	14.30	1.08	0.54	22.72	9.49	5.76
1000	15.63	19.39	15.51	13.94	1.08	0.54	21.96	8.97	5.74
1500	15.41	19.56	13.70	12.27	1.09	0.55	21.41	8.52	5.93
2000	15.27	19.62	13.60	11.87	1.10	0.56	21.33	8.25	5.98
2500	15.10	19.66	13.95	11.97	1.11	0.58	21.78	8.36	5.99
3000	14.92	19.69	13.91	11.80	1.13	0.60	22.29	8.55	6.05
3500	14.73	19.73	13.90	11.57	1.14	0.62	20.85	8.13	6.14
4000	14.58	19.68	14.73	11.67	1.15	0.64	20.19	8.21	6.12
4500	14.49	19.57	16.60	11.93	1.16	0.64	19.32	8.32	6.00
5000	14.38	19.51	19.42	11.83	1.16	0.64	19.13	8.78	5.90
5500	14.24	19.41	25.07	11.80	1.16	0.64	18.32	8.85	5.88
6000	14.09	19.36	29.81	11.80	1.17	0.66	17.38	8.46	5.87
6500	13.95	19.25	27.31	12.24	1.17	0.67	16.35	8.01	5.91
7000	13.84	19.12	27.07	13.50	1.18	0.68	15.42	7.50	6.03
7500	13.71	18.99	21.45	15.84	1.19	0.72	14.68	6.86	6.11
8000	13.50	18.93	16.31	19.36	1.20	0.77	13.82	6.00	6.30
8500	13.22	18.95	14.22	21.92	1.21	0.83	12.83	4.98	6.27
9000	12.89	19.07	13.89	23.75	1.26	0.86	12.20	4.27	6.43
9500	12.58	19.13	14.99	22.33	1.32	0.85	11.52	3.51	6.41
10000	12.25	19.17	16.31	19.61	1.37	0.82	10.98	2.89	6.46
10500	11.92	19.23	16.70	16.60	1.41	0.82	10.47	2.35	6.47
11000	11.62	19.20	15.90	14.61	1.42	0.84	10.09	1.69	6.45
11500	11.31	19.19	14.31	13.33	1.44	0.84	9.54	1.09	6.42
12000	10.91	19.20	12.54	12.19	1.47	0.83	9.57	0.60	6.42
12500	10.29	19.36	10.87	10.27	1.53	0.83	9.21	-0.08	6.53
13000	9.56	19.66	9.81	8.71	1.62	0.83	9.06	-0.52	6.72
13500	8.92	19.88	10.01	8.05	1.72	0.84	8.71	-0.80	6.84
14000	8.43	19.88	10.98	8.29	1.83	0.85	8.92	-0.62	7.04
14500	8.01	19.78	11.48	8.95	1.94	0.83	8.91	-0.51	7.27
15000	7.62	19.73	11.37	9.26	2.03	0.80	9.14	-0.44	7.53
15500	7.19	19.67	11.91	9.06	2.12	0.79	9.08	-0.65	7.86
16000	6.88	19.52	14.09	8.88	2.20	0.81	9.14	-0.77	7.81
16500	6.59	19.32	14.81	9.30	2.26	0.86	8.65	-0.93	7.70
17000	6.15	19.35	11.41	10.26	2.34	0.94	8.33	-1.25	7.52
17500	5.68	19.42	10.01	12.32	2.49	1.02	8.10	-1.86	7.93
18000	5.16	19.52	10.78	16.35	2.73	1.04	7.36	-2.76	8.37