MMIC Amplifier AVA-24+

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=118.92mA @ Temperature = +25degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output	1dB Comp. Output	Noise Figure
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dB)
4400.0	12.63	43.14	9.75	20.85	14.74	1.09	26.06	17.72	8.07
4600.0	13.11	41.28	11.16	26.55	12.15	1.07	27.89	18.12	7.68
4800.0	13.28	40.72	12.53	35.65	11.63	1.05	26.75	18.42	7.36
5000.0	13.41	39.32	13.74	44.54	9.80	1.04	28.42	18.64	7.07
5200.0	13.42	39.03	14.93	34.43	9.52	1.03	27.50	18.50	6.92
5400.0	13.41	38.65	15.80	30.36	8.95	1.02	27.75	18.65	6.78
5600.0	13.41	38.60	16.74	28.79	8.94	1.02	28.15	18.69	6.65
5800.0	13.39	38.36	17.42	28.00	9.01	1.01	27.82	18.72	6.52
6000.0	13.39	38.15	18.30	27.14	8.61	1.01	27.96	18.85	6.35
6500.0	13.40	37.85	20.89	28.01	8.44	1.00	28.08	18.68	6.18
7000.0	13.44	37.39	24.39	31.49	8.16	1.00	27.98	18.75	6.03
7500.0	13.46	37.53	33.61	32.08	8.19	1.00	27.24	18.95	5.89
8000.0	13.47	37.26	30.05	25.42	8.15	0.99	28.38	18.65	5.84
8500.0	13.29	36.56	23.78	22.05	7.70	0.99	27.58	18.57	5.87
9000.0	13.23	37.24	18.98	19.10	8.41	1.00	27.52	18.92	5.91
9500.0	13.10	37.55	17.49	17.47	8.41	0.99	27.68	18.72	5.54
10000.0	12.96	37.40	15.69	16.35	8.43	1.00	27.78	18.72	5.16
10500.0	12.79	37.80	14.06	15.99	8.54	1.00	28.16	18.65	5.61
11500.0	12.57	37.99	12.81	15.13	9.73	1.01	26.71	18.62	6.08
12000.0	12.47	38.14	12.77	14.62	9.64	1.01	28.44	18.85	6.08
12500.0	12.30	38.64	11.13	13.90	9.60	1.02	26.69	18.58	6.02
13000.0	12.23	38.70	10.74	13.71	9.85	1.03	26.85	18.76	6.06
13500.0	12.22	38.45	11.00	13.43	9.30	1.02	26.74	18.66	6.00
14000.0	12.15	38.39	11.25	15.32	9.59	1.03	27.14	18.70	6.00
14500.0	12.48	37.06	11.66	15.42	7.89	1.03	26.47	18.60	5.99
15000.0	12.65	38.03	14.03	16.52	9.12	1.01	27.49	18.77	5.92
15500.0	12.77	38.05	13.65	19.59	8.88	1.03	26.80	18.79	5.91
16000.0	12.90	37.44	14.35	22.84	8.43	1.03	26.95	18.40	5.89
16500.0	12.94	36.73	14.77	29.04	8.36	1.03	26.55	18.12	6.55
17000.0	12.91	36.53	12.95	35.59	7.66	1.04	25.27	17.87	6.92
17500.0	12.92	35.73	13.58	29.50	6.88	1.03	25.21	17.72	6.20
18000.0	12.93	34.18	14.10	27.93	6.01	1.03	25.39	17.97	5.77
18500.0	12.87	33.00	17.52	23.21	5.31	1.00	25.00	17.72	5.85
19000.0	12.50	31.32	17.32	19.46	4.70	0.99	23.88	17.13	6.05
19500.0	11.67	30.71	15.98	17.27	4.58	0.99	25.65	17.56	6.31
20000.0	10.22	29.77	13.30	14.55	4.92	0.99	24.72	17.64	6.93

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=117.48mA @ Temperature = +25degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output	1dB Comp. Output	Noise Figure
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dB)
4400.0	12.69	42.84	9.65	20.84	15.27	1.10	25.47	17.40	7.86
4600.0	13.17	41.18	11.06	26.22	11.81	1.07	26.97	17.78	7.53
4800.0	13.34	40.39	12.37	33.55	11.53	1.05	26.96	18.10	7.16
5000.0	13.46	39.48	13.62	46.57	9.94	1.04	26.95	18.31	6.94
5200.0	13.47	39.04	14.79	39.07	9.51	1.03	27.01	18.11	6.76
5400.0	13.46	38.55	15.65	33.43	9.07	1.02	27.19	18.26	6.58
5600.0	13.45	38.46	16.60	31.47	8.87	1.02	26.75	18.30	6.45
5800.0	13.43	38.32	17.27	30.64	8.90	1.01	26.83	18.34	6.31
6000.0	13.43	38.16	18.13	29.66	8.68	1.01	28.58	18.49	6.17
6500.0	13.44	37.77	20.63	31.02	8.49	1.00	27.17	18.27	6.00
7000.0	13.48	37.58	24.02	36.18	8.40	1.00	27.77	18.36	5.83
7500.0	13.50	37.39	32.47	32.31	8.18	1.00	27.96	18.59	5.70
8000.0	13.51	36.98	30.96	25.23	7.86	0.99	27.65	18.23	5.65
8500.0	13.34	36.40	24.10	22.10	7.35	0.99	27.98	18.16	5.66
9000.0	13.28	37.41	19.21	19.21	8.40	1.00	27.43	18.60	5.73
9500.0	13.16	37.83	17.63	17.62	8.38	0.99	26.80	18.36	5.34
10000.0	13.02	37.31	15.88	16.51	8.41	1.00	25.67	18.39	4.98
10500.0	12.87	37.81	14.27	16.29	8.63	1.00	26.01	18.30	5.45
11500.0	12.65	38.14	12.94	15.29	9.02	1.01	27.39	18.26	5.85
12000.0	12.55	38.30	12.84	14.78	8.82	1.01	26.74	18.61	5.86
12500.0	12.39	38.27	11.20	14.02	9.43	1.02	26.97	18.25	5.82
13000.0	12.32	38.38	10.75	13.79	9.73	1.03	27.64	18.56	5.87
13500.0	12.30	38.12	10.97	13.71	9.53	1.02	28.87	18.44	5.77
14000.0	12.25	37.92	11.24	15.56	9.45	1.03	27.88	18.52	5.82
14500.0	12.59	37.09	11.50	15.78	7.89	1.03	26.39	18.42	5.77
15000.0	12.76	37.35	13.86	17.09	8.79	1.02	26.64	18.49	5.69
15500.0	12.88	37.73	13.61	20.36	9.16	1.03	26.29	18.48	5.70
16000.0	13.03	36.95	14.30	23.77	8.02	1.03	25.82	18.00	5.69
16500.0	13.07	36.74	14.78	29.71	8.05	1.03	26.98	17.74	6.31
17000.0	13.04	36.34	12.91	33.40	7.25	1.04	24.67	17.46	6.69
17500.0	13.04	35.33	13.30	28.05	6.62	1.03	25.54	17.30	5.97
18000.0	13.06	34.16	13.83	27.71	5.83	1.03	25.19	17.59	5.62
18500.0	13.02	32.81	17.23	23.27	5.24	1.00	25.26	17.32	5.71
19000.0	12.70	31.29	17.21	20.06	4.45	0.99	23.91	16.76	5.86
19500.0	11.93	30.36	16.54	17.41	4.50	0.99	24.53	17.17	6.16
20000.0	10.47	29.62	13.46	14.47	4.56	0.99	23.98	17.34	6.67

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=120.41mA @ Temperature = +25degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output	1dB Comp. Output	Noise Figure
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dB)
4400.0	12.61	42.59	9.83	20.82	15.73	1.09	26.40	17.97	8.16
4600.0	13.09	41.29	11.23	26.60	11.80	1.07	28.05	18.40	7.80
4800.0	13.27	40.71	12.61	35.55	11.42	1.05	27.68	18.70	7.45
5000.0	13.39	39.35	13.84	37.21	9.93	1.04	29.21	18.95	7.19
5200.0	13.40	38.86	15.04	31.35	9.45	1.03	28.47	18.84	7.01
5400.0	13.40	38.59	15.90	28.35	8.97	1.02	28.58	18.98	6.86
5600.0	13.39	38.49	16.85	26.94	9.08	1.02	29.16	19.04	6.72
5800.0	13.38	38.22	17.60	26.30	9.05	1.01	28.66	19.09	6.58
6000.0	13.38	38.11	18.49	25.60	8.95	1.01	28.92	19.20	6.46
6500.0	13.39	37.71	21.15	26.19	8.34	1.00	28.91	19.05	6.29
7000.0	13.42	37.51	24.80	28.90	8.31	1.00	28.72	19.10	6.10
7500.0	13.44	37.48	34.45	30.65	7.99	1.00	27.13	19.27	6.01
8000.0	13.45	37.23	28.96	25.20	8.07	0.99	28.03	19.00	5.92
8500.0	13.26	36.38	23.31	21.83	7.46	0.99	28.55	18.96	5.95
9000.0	13.20	37.61	18.74	18.96	8.45	1.00	27.78	19.21	5.98
9500.0	13.07	37.64	17.29	17.27	8.63	0.99	28.86	19.06	5.62
10000.0	12.92	37.64	15.53	16.19	8.52	1.00	28.08	19.05	5.23
10500.0	12.76	37.74	13.99	15.85	8.64	1.00	29.99	19.01	5.73
11500.0	12.52	38.36	12.78	15.05	9.51	1.01	27.52	18.95	6.18
12000.0	12.41	38.50	12.67	14.53	9.85	1.01	26.35	19.09	6.15
12500.0	12.24	38.60	11.09	13.79	9.85	1.02	28.27	18.90	6.06
13000.0	12.17	38.40	10.70	13.59	9.88	1.03	27.48	18.96	6.15
13500.0	12.15	38.98	10.98	13.20	9.78	1.02	28.81	18.87	6.09
14000.0	12.08	38.37	11.23	15.01	10.09	1.03	27.93	18.91	6.11
14500.0	12.41	36.81	11.67	15.06	7.98	1.03	27.54	18.80	6.04
15000.0	12.58	37.94	14.08	16.00	9.46	1.01	28.13	19.01	5.97
15500.0	12.69	38.04	13.70	18.85	9.58	1.02	27.91	19.08	5.96
16000.0	12.83	37.46	14.44	22.02	8.56	1.03	27.40	18.78	5.95
16500.0	12.86	37.04	14.84	27.60	8.60	1.03	27.99	18.49	6.63
17000.0	12.82	36.27	13.04	36.29	7.73	1.04	26.31	18.26	7.01
17500.0	12.84	35.59	13.68	29.85	7.01	1.03	26.90	18.12	6.31
18000.0	12.82	34.24	14.06	27.92	6.08	1.03	26.79	18.36	5.86
18500.0	12.74	33.01	17.50	22.61	5.48	1.00	25.93	18.09	5.91
19000.0	12.34	31.60	16.98	19.03	4.91	0.99	24.94	17.52	6.13
19500.0	11.49	30.67	15.91	17.11	4.80	0.99	27.06	17.91	6.38
20000.0	10.02	30.32	12.99	14.25	5.24	0.99	25.50	18.01	7.04

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=121.73mA @ Temperature = -45degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output	1dB Comp. Output	Noise Figure
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dB)
4400.0	14.76	42.64	8.77	20.61	11.09	1.12	26.86	18.23	6.47
4600.0	15.11	41.27	10.36	23.83	9.22	1.09	27.30	18.63	6.15
4800.0	15.18	40.50	11.97	25.88	8.65	1.06	27.74	18.92	5.84
5000.0	15.19	39.43	13.53	27.61	7.90	1.04	30.05	19.20	5.62
5200.0	15.14	39.02	15.03	29.66	7.74	1.03	29.03	18.97	5.46
5400.0	15.08	38.67	16.24	31.05	7.52	1.02	27.81	19.10	5.31
5600.0	15.03	38.54	17.66	33.20	7.60	1.01	28.50	19.18	5.20
5800.0	14.98	38.43	18.56	34.11	7.47	1.01	28.70	19.27	5.07
6000.0	14.96	38.05	19.70	37.44	7.41	1.01	28.85	19.39	4.94
6500.0	14.94	37.93	22.44	35.76	7.34	1.00	28.22	19.14	4.78
7000.0	14.95	37.73	25.31	29.94	7.04	1.00	31.36	19.26	4.59
7500.0	14.97	37.39	30.12	25.16	6.90	0.99	28.03	19.54	4.50
8000.0	14.99	37.22	28.29	22.57	6.86	0.99	26.74	19.13	4.42
8500.0	14.81	36.43	22.01	21.51	6.15	0.99	27.95	19.17	4.42
9000.0	14.80	37.55	19.94	19.24	7.00	0.99	28.27	19.60	4.47
9500.0	14.70	37.62	18.10	17.82	6.89	0.99	28.40	19.42	4.06
10000.0	14.57	37.34	15.65	17.44	7.12	1.00	26.15	19.59	3.68
10500.0	14.46	37.39	14.50	16.76	7.05	1.01	28.38	19.48	4.12
11500.0	14.30	37.86	13.75	15.50	7.27	1.01	26.70	19.48	4.52
12000.0	14.16	37.83	12.06	15.04	6.96	1.02	27.63	19.71	4.54
12500.0	13.99	37.78	10.54	14.12	7.30	1.03	29.44	19.28	4.47
13000.0	13.96	38.14	10.54	13.96	7.54	1.03	29.19	19.59	4.49
13500.0	13.96	37.79	10.44	14.74	7.14	1.04	26.71	19.51	4.42
14000.0	13.89	37.86	11.00	16.51	7.79	1.04	27.95	19.55	4.46
14500.0	14.29	36.00	11.97	16.96	6.10	1.03	27.26	19.47	4.37
15000.0	14.46	37.46	13.92	20.00	7.25	1.02	28.82	19.55	4.34
15500.0	14.52	37.18	13.08	23.59	6.85	1.04	26.93	19.43	4.33
16000.0	14.72	36.55	14.69	25.08	6.36	1.02	27.31	18.84	4.29
16500.0	14.74	36.35	13.34	25.85	6.09	1.03	28.03	18.74	4.92
17000.0	14.73	35.51	12.44	25.19	5.59	1.04	26.95	18.37	5.38
17500.0	14.78	34.63	12.19	26.86	5.00	1.04	25.85	18.28	4.61
18000.0	14.84	33.34	12.35	30.83	4.37	1.04	26.14	18.67	4.17
18500.0	14.87	32.01	16.47	27.40	3.92	1.00	25.44	18.35	4.18
19000.0	14.63	30.54	16.95	25.71	3.39	0.99	25.92	18.04	4.34
19500.0	14.01	29.51	17.19	20.99	3.28	0.98	25.50	18.39	4.47
20000.0	12.40	28.86	10.37	16.37	3.28	1.02	26.24	18.94	5.13

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=120.13mA @ Temperature = -45degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output	1dB Comp. Output	Noise Figure
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dB)
4400.0	14.73	42.61	8.71	20.06	10.97	1.12	25.38	17.85	6.38
4600.0	15.08	41.27	10.28	22.60	9.10	1.09	27.58	18.23	6.07
4800.0	15.15	40.55	11.88	23.92	8.89	1.06	27.13	18.53	5.75
5000.0	15.16	39.32	13.42	25.26	7.88	1.04	27.33	18.78	5.53
5200.0	15.11	38.96	14.88	26.75	8.05	1.03	27.27	18.54	5.38
5400.0	15.05	38.78	16.03	27.78	7.66	1.02	28.12	18.67	5.26
5600.0	15.00	38.47	17.46	29.29	7.83	1.01	27.56	18.74	5.14
5800.0	14.95	38.55	18.32	29.83	7.55	1.01	27.06	18.83	5.00
6000.0	14.93	38.03	19.42	31.60	7.59	1.01	29.02	18.95	4.87
6500.0	14.91	38.01	22.07	30.08	7.36	1.00	27.56	18.68	4.71
7000.0	14.93	37.79	24.85	26.57	7.02	1.00	28.06	18.80	4.58
7500.0	14.95	37.53	29.80	23.12	7.02	0.99	28.03	19.09	4.42
8000.0	14.97	37.23	29.28	21.30	6.56	0.99	28.20	18.67	4.36
8500.0	14.80	36.47	22.40	20.57	6.28	0.99	26.99	18.71	4.35
9000.0	14.78	37.40	20.25	18.78	7.00	0.99	27.03	19.16	4.38
9500.0	14.69	37.57	18.28	17.60	7.04	0.99	26.67	18.98	4.02
10000.0	14.57	37.67	15.78	17.30	7.08	1.00	27.12	19.16	3.60
10500.0	14.47	37.29	14.61	16.65	6.89	1.00	27.41	19.03	4.04
11500.0	14.32	37.72	13.82	15.46	7.22	1.00	27.13	19.05	4.45
12000.0	14.19	37.80	12.13	15.02	7.35	1.02	27.30	19.34	4.48
12500.0	14.02	37.68	10.56	14.16	7.11	1.03	27.31	18.86	4.39
13000.0	14.00	37.74	10.57	14.07	7.47	1.03	27.16	19.27	4.42
13500.0	14.00	37.64	10.45	14.98	7.24	1.04	26.52	19.15	4.34
14000.0	13.93	37.98	10.95	16.84	7.74	1.05	27.33	19.23	4.38
14500.0	14.33	35.98	11.91	17.62	5.94	1.04	27.03	19.12	4.31
15000.0	14.50	37.13	13.89	21.24	6.90	1.03	26.69	19.16	4.24
15500.0	14.56	37.03	13.02	25.36	6.83	1.04	26.11	19.01	4.24
16000.0	14.78	36.12	14.60	25.42	6.19	1.02	26.17	18.40	4.21
16500.0	14.79	36.03	13.41	24.75	6.10	1.03	25.66	18.31	4.87
17000.0	14.79	35.42	12.36	23.42	5.52	1.04	25.44	17.94	5.29
17500.0	14.85	34.55	12.05	25.30	4.97	1.04	25.99	17.84	4.55
18000.0	14.92	33.42	12.28	29.00	4.15	1.04	26.33	18.23	4.11
18500.0	14.99	31.94	16.34	29.29	3.79	1.00	24.44	17.92	4.14
19000.0	14.77	30.37	17.08	27.62	3.28	0.99	24.35	17.61	4.27
19500.0	14.18	29.34	17.88	21.88	3.14	0.98	24.26	17.92	4.39
20000.0	12.62	28.82	10.54	16.41	3.20	1.02	24.81	18.51	5.04

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=123.37mA @ Temperature = -45degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output	1dB Comp. Output	Noise Figure
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dB)
4400.0	14.80	42.94	8.81	20.89	10.71	1.12	26.54	18.54	6.51
4600.0	15.15	40.99	10.41	24.76	9.05	1.08	27.37	18.97	6.22
4800.0	15.21	40.55	12.05	27.63	8.70	1.06	27.81	19.27	5.89
5000.0	15.23	39.24	13.64	30.13	7.69	1.04	28.34	19.55	5.68
5200.0	15.17	38.82	15.19	32.86	7.54	1.03	29.99	19.36	5.55
5400.0	15.11	38.48	16.38	34.44	7.55	1.02	29.93	19.46	5.39
5600.0	15.06	38.46	17.88	36.73	7.61	1.01	28.65	19.57	5.25
5800.0	15.01	38.51	18.81	38.39	7.58	1.01	29.76	19.66	5.11
6000.0	14.99	38.30	19.95	42.58	7.27	1.01	29.89	19.78	4.97
6500.0	14.97	37.83	22.78	47.03	7.26	1.00	28.70	19.54	4.82
7000.0	14.98	37.58	25.69	34.07	7.11	1.00	29.49	19.67	4.65
7500.0	15.00	37.52	30.13	27.22	6.93	0.99	30.31	19.92	4.56
8000.0	15.02	37.12	27.71	23.71	6.77	0.99	29.35	19.55	4.49
8500.0	14.83	36.42	21.69	22.34	6.17	1.00	28.31	19.57	4.47
9000.0	14.81	37.69	19.62	19.53	6.96	0.99	28.53	19.95	4.50
9500.0	14.71	37.25	17.82	17.95	6.93	0.99	30.34	19.81	4.16
10000.0	14.57	37.53	15.42	17.44	7.18	1.00	27.34	19.95	3.74
10500.0	14.45	37.56	14.30	16.74	7.16	1.01	28.79	19.87	4.18
11500.0	14.29	37.84	13.58	15.49	7.43	1.00	28.74	19.86	4.59
12000.0	14.15	37.60	11.94	14.94	7.18	1.02	27.25	20.02	4.64
12500.0	13.97	38.01	10.43	14.06	7.54	1.03	27.20	19.65	4.56
13000.0	13.94	37.94	10.51	13.86	7.45	1.03	28.47	19.85	4.57
13500.0	13.93	37.68	10.43	14.54	7.34	1.04	27.60	19.80	4.52
14000.0	13.86	38.02	10.99	16.24	8.13	1.04	29.74	19.81	4.53
14500.0	14.26	36.29	12.01	16.45	5.89	1.03	28.70	19.73	4.45
15000.0	14.42	37.30	14.02	19.16	7.39	1.02	26.99	19.88	4.38
15500.0	14.48	37.08	13.14	22.48	6.95	1.04	28.09	19.80	4.39
16000.0	14.69	36.59	14.75	24.33	6.35	1.02	28.01	19.23	4.36
16500.0	14.68	36.44	13.30	26.71	6.15	1.04	27.68	19.13	4.98
17000.0	14.68	35.56	12.49	26.82	5.64	1.04	27.60	18.77	5.45
17500.0	14.70	34.77	12.24	28.08	5.21	1.04	28.47	18.65	4.71
18000.0	14.76	33.37	12.48	31.83	4.44	1.04	28.46	19.08	4.23
18500.0	14.77	32.26	16.50	25.50	4.01	1.00	28.14	18.77	4.28
19000.0	14.49	30.64	16.80	24.40	3.43	0.99	27.12	18.46	4.39
19500.0	13.83	29.75	16.38	20.46	3.36	0.99	28.51	18.79	4.58
20000.0	12.21	29.10	10.11	16.22	3.48	1.03	27.34	19.37	5.23

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=113.70mA @ Temperature = +85degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output	1dB Comp. Output	Noise Figure
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dB)
4400.0	9.92	43.07	10.21	19.45	21.20	1.08	25.59	17.10	9.92
4600.0	10.53	41.68	11.34	23.16	16.32	1.07	26.94	17.46	9.53
4800.0	10.84	40.67	12.46	26.21	15.51	1.05	27.63	17.74	9.14
5000.0	11.06	39.31	13.32	25.21	12.71	1.04	27.41	17.91	8.86
5200.0	11.15	38.96	14.17	23.61	12.08	1.03	27.06	17.90	8.63
5400.0	11.21	38.60	14.88	22.46	11.59	1.02	26.74	18.05	8.45
5600.0	11.24	38.25	15.43	21.81	10.93	1.02	27.10	18.05	8.31
5800.0	11.26	38.21	16.08	21.31	10.89	1.02	28.58	18.07	8.19
6000.0	11.28	37.80	16.76	21.01	10.42	1.01	28.60	18.12	8.02
6500.0	11.32	37.32	19.30	21.32	10.30	1.00	26.94	18.04	7.84
7000.0	11.36	37.21	23.28	22.19	10.05	1.00	26.41	18.01	7.66
7500.0	11.38	37.14	33.09	23.32	9.81	0.99	27.30	18.10	7.59
8000.0	11.36	36.99	26.20	21.51	10.14	0.99	26.20	17.95	7.52
8500.0	11.20	36.07	23.87	18.76	9.02	0.99	28.03	17.86	7.54
9000.0	11.09	37.30	17.61	16.88	10.10	0.99	27.49	17.86	7.64
9500.0	10.95	37.21	16.88	15.78	10.52	0.99	27.51	17.77	7.27
10000.0	10.79	37.66	15.86	14.85	10.78	0.99	27.98	17.73	6.91
10500.0	10.62	38.10	14.37	14.82	11.40	1.00	27.28	17.67	7.43
11500.0	10.27	38.66	12.34	14.49	12.56	1.02	27.60	17.56	7.92
12000.0	10.18	38.79	13.41	13.93	13.60	1.00	28.03	17.60	7.89
12500.0	10.00	38.91	11.55	13.48	13.03	1.01	27.97	17.46	7.88
13000.0	9.90	39.24	10.79	13.14	13.93	1.03	27.28	17.46	7.99
13500.0	9.90	39.13	11.56	12.19	14.32	1.00	27.43	17.24	7.90
14000.0	9.86	38.41	11.35	13.86	12.93	1.02	27.58	17.36	7.93
14500.0	10.13	36.98	11.29	14.40	10.77	1.03	27.37	17.23	7.88
15000.0	10.34	38.50	13.85	13.71	12.39	0.99	26.62	17.46	7.79
15500.0	10.51	38.55	14.45	16.79	12.62	1.01	27.07	17.66	7.74
16000.0	10.63	37.98	14.61	19.24	12.16	1.02	25.63	17.66	7.75
16500.0	10.68	37.79	17.25	23.72	11.88	1.01	27.69	17.46	8.37
17000.0	10.63	36.75	14.28	25.86	10.81	1.03	27.28	17.33	8.72
17500.0	10.64	35.83	15.31	28.33	9.70	1.02	27.05	17.14	8.04
18000.0	10.59	34.70	15.32	25.71	8.33	1.02	26.63	17.36	7.63
18500.0	10.45	33.33	17.19	20.04	7.53	1.00	26.99	17.12	7.70
19000.0	10.04	32.24	17.89	16.63	6.75	0.98	26.44	16.62	7.94
19500.0	9.16	31.23	14.64	14.87	6.54	0.99	26.65	17.01	8.19
20000.0	7.79	30.56	16.93	12.59	6.95	0.95	26.49	16.90	8.87

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=112.45mA @ Temperature = +85degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output	1dB Comp. Output	Noise Figure
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dB)
4400.0	9.87	43.26	10.15	19.60	21.01	1.08	26.58	16.80	9.90
4600.0	10.49	41.38	11.25	23.68	17.21	1.07	26.45	17.15	9.49
4800.0	10.80	40.92	12.36	27.27	15.70	1.05	26.45	17.43	9.09
5000.0	11.02	39.38	13.21	26.36	12.67	1.04	26.81	17.58	8.78
5200.0	11.11	39.08	14.06	24.57	12.32	1.03	27.60	17.53	8.63
5400.0	11.17	38.50	14.74	23.34	11.43	1.03	26.82	17.68	8.42
5600.0	11.20	38.02	15.29	22.59	11.18	1.02	27.57	17.67	8.29
5800.0	11.22	37.93	15.91	22.06	10.93	1.02	26.86	17.68	8.12
6000.0	11.24	37.65	16.59	21.79	10.92	1.01	26.82	17.76	7.98
6500.0	11.28	37.27	19.09	22.12	10.32	1.00	28.28	17.66	7.81
7000.0	11.32	37.08	22.85	23.12	10.00	1.00	28.03	17.65	7.64
7500.0	11.34	37.27	31.88	24.14	10.02	0.99	27.32	17.74	7.51
8000.0	11.33	37.10	26.60	22.09	10.17	0.99	27.74	17.57	7.48
8500.0	11.17	36.10	24.30	19.10	9.13	0.99	26.93	17.48	7.53
9000.0	11.06	37.15	17.78	17.20	10.19	0.99	26.45	17.58	7.60
9500.0	10.93	37.40	17.01	16.04	10.58	0.99	27.84	17.43	7.23
10000.0	10.77	37.30	16.02	15.04	11.06	0.99	27.49	17.38	6.88
10500.0	10.60	37.99	14.40	15.02	11.61	1.00	27.33	17.30	7.38
11500.0	10.26	38.48	12.37	14.64	12.38	1.02	27.23	17.22	7.87
12000.0	10.17	38.74	13.42	14.05	13.07	1.00	27.26	17.35	7.87
12500.0	9.99	38.76	11.59	13.59	12.93	1.01	26.49	17.17	7.84
13000.0	9.90	39.15	10.80	13.23	13.70	1.03	27.05	17.23	7.89
13500.0	9.89	39.27	11.61	12.31	13.64	1.00	26.03	17.02	7.82
14000.0	9.86	38.39	11.34	14.05	12.98	1.02	27.93	17.12	7.83
14500.0	10.13	37.09	11.26	14.64	10.69	1.03	27.60	17.03	7.80
15000.0	10.34	38.52	13.77	13.99	12.21	1.00	26.68	17.20	7.72
15500.0	10.52	38.14	14.37	17.19	12.51	1.01	26.20	17.37	7.64
16000.0	10.64	38.07	14.57	19.82	11.87	1.02	25.85	17.29	7.69
16500.0	10.70	37.55	17.12	24.50	11.43	1.01	25.90	17.03	8.30
17000.0	10.65	36.81	14.29	27.03	10.25	1.03	26.79	16.90	8.64
17500.0	10.67	35.80	15.36	27.47	9.44	1.02	25.98	16.69	7.96
18000.0	10.63	34.48	15.25	25.69	7.99	1.02	25.81	16.90	7.49
18500.0	10.51	33.12	17.09	20.14	7.27	1.00	26.34	16.68	7.60
19000.0	10.13	32.14	18.12	16.66	6.73	0.99	26.30	16.17	7.87
19500.0	9.27	31.05	14.83	15.09	6.29	0.99	26.17	16.58	8.11
20000.0	7.92	30.48	17.20	12.69	6.72	0.96	24.55	16.44	8.78

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=115.25mA @ Temperature = +85degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output	1dB Comp. Output	Noise Figure
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dB)
4400.0	10.00	43.06	10.26	19.23	20.72	1.08	26.15	17.31	9.96
4600.0	10.61	41.50	11.42	22.71	16.78	1.07	26.34	17.69	9.52
4800.0	10.91	40.90	12.56	25.36	15.15	1.05	26.92	17.96	9.14
5000.0	11.13	39.25	13.43	24.38	12.88	1.04	26.99	18.15	8.86
5200.0	11.22	39.00	14.34	22.94	12.26	1.03	27.36	18.21	8.66
5400.0	11.28	38.38	15.04	21.84	11.45	1.02	27.64	18.35	8.47
5600.0	11.31	38.30	15.63	21.24	10.81	1.02	27.42	18.37	8.32
5800.0	11.32	38.01	16.25	20.77	10.89	1.01	28.56	18.41	8.20
6000.0	11.34	37.59	17.00	20.49	10.71	1.01	27.66	18.41	8.04
6500.0	11.39	37.35	19.61	20.71	10.22	1.00	27.59	18.36	7.86
7000.0	11.43	37.15	23.74	21.56	10.11	0.99	26.77	18.27	7.69
7500.0	11.45	37.13	35.13	22.61	9.89	0.99	28.33	18.33	7.58
8000.0	11.42	37.13	25.94	21.11	9.67	0.99	27.23	18.24	7.53
8500.0	11.25	36.30	23.53	18.50	9.37	0.99	28.21	18.19	7.57
9000.0	11.14	37.51	17.52	16.68	10.28	0.99	26.88	18.09	7.67
9500.0	11.00	37.44	16.81	15.65	10.74	0.99	28.04	18.06	7.31
10000.0	10.83	37.68	15.80	14.70	10.81	0.99	27.10	18.03	6.96
10500.0	10.65	38.24	14.27	14.67	11.48	1.00	27.00	17.97	7.46
11500.0	10.29	38.70	12.33	14.39	13.12	1.01	29.15	17.87	7.94
12000.0	10.20	38.76	13.47	13.87	13.39	1.00	26.90	17.81	7.97
12500.0	10.01	39.31	11.58	13.38	13.28	1.01	27.61	17.70	7.97
13000.0	9.90	39.42	10.83	13.04	13.76	1.02	27.85	17.65	8.01
13500.0	9.89	39.15	11.63	12.10	14.14	1.00	29.51	17.43	7.92
14000.0	9.84	38.57	11.45	13.77	12.95	1.02	26.44	17.54	7.92
14500.0	10.10	37.35	11.47	14.15	10.72	1.03	26.94	17.44	7.90
15000.0	10.30	38.31	14.14	13.43	12.64	0.99	28.20	17.70	7.79
15500.0	10.47	38.60	14.79	16.56	13.09	1.01	28.36	17.87	7.76
16000.0	10.60	38.38	14.90	18.78	12.47	1.02	28.13	17.97	7.79
16500.0	10.65	38.11	17.58	22.91	12.38	1.01	28.99	17.81	8.42
17000.0	10.60	37.00	14.37	25.00	10.73	1.03	27.47	17.71	8.74
17500.0	10.60	35.95	15.43	28.82	9.67	1.02	27.58	17.54	8.08
18000.0	10.54	34.53	15.37	26.10	8.45	1.02	27.01	17.71	7.64
18500.0	10.38	33.59	17.10	20.02	7.61	1.00	27.20	17.53	7.74
19000.0	9.95	32.49	17.48	16.47	6.97	0.99	26.70	17.02	7.96
19500.0	9.04	31.31	14.40	14.70	6.66	0.99	26.87	17.40	8.28
20000.0	7.66	30.79	16.69	12.56	7.12	0.95	28.03	17.18	8.89