

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 = 5V, Id = 134.69 mA @ 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)
20	19.46	23.74	7.35	9.70	0.90	0.69	38.74	22.12	1.85
30	18.68	22.49	9.08	11.45	0.92	0.67	39.26	22.80	1.85
40	18.11	21.81	10.67	13.11	0.96	0.65	39.00	22.96	1.82
50	17.71	21.33	12.10	14.56	0.99	0.63	38.54	22.68	1.76
60	17.42	21.37	13.22	15.96	1.02	0.65	39.62	22.57	1.82
70	17.24	21.13	14.24	16.97	1.04	0.64	39.57	22.73	1.84
80	17.10	21.04	15.11	17.99	1.05	0.63	39.96	22.77	1.84
90	17.00	20.95	15.86	18.82	1.06	0.63	40.62	22.76	1.84
100	16.92	20.89	16.48	19.59	1.07	0.63	40.68	22.96	1.84
200	16.61	20.76	19.79	24.15	1.10	0.63	42.77	22.66	1.80
400	16.39	20.70	20.53	26.61	1.11	0.64	42.99	22.68	2.03
600	16.18	20.57	19.63	26.42	1.12	0.65	43.74	22.75	2.08
800	15.93	20.52	18.38	25.57	1.12	0.67	43.66	22.69	1.98
1000	15.63	20.43	17.17	24.39	1.13	0.69	43.25	22.55	2.07
1200	15.31	20.29	16.02	23.38	1.14	0.71	45.00	22.71	2.10
1400	14.96	20.15	15.06	22.33	1.14	0.73	44.89	22.71	2.13
1600	14.60	20.00	14.26	21.50	1.15	0.75	43.74	22.83	2.19
1800	14.24	19.85	13.58	20.56	1.15	0.77	43.96	22.65	2.25
2000	13.89	19.67	13.03	19.83	1.15	0.79	43.45	22.76	2.24
2200	13.54	19.50	12.60	19.20	1.16	0.81	43.40	22.56	2.29
2400	13.21	19.29	12.23	18.55	1.16	0.82	44.03	22.89	2.32
2600	12.87	19.13	12.04	18.03	1.16	0.84	43.68	22.98	2.37
2800	12.58	18.93	11.81	17.40	1.16	0.85	42.22	22.80	2.51
3000	12.31	18.73	11.57	16.79	1.16	0.85	43.63	22.83	2.49
3200	12.03	18.55	11.52	16.41	1.16	0.86	42.35	23.08	2.53
3400	11.75	18.30	11.31	16.19	1.15	0.87	41.75	22.90	2.60
3600	11.56	18.10	11.09	15.75	1.14	0.87	41.62	22.95	2.68
3800	11.30	17.98	11.04	15.72	1.15	0.88	41.26	22.93	2.72
4000	11.11	17.72	10.66	15.54	1.14	0.88	40.64	22.94	2.80
4200	10.93	17.54	10.41	15.43	1.13	0.89	41.08	22.97	2.90
4400	10.68	17.27	10.02	15.58	1.12	0.90	40.44	22.79	3.02
4600	10.58	17.05	9.59	15.18	1.09	0.90	40.21	22.91	3.00
4800	10.45	16.92	9.29	15.01	1.08	0.91	40.12	22.82	3.10
5000	10.33	16.79	9.00	14.92	1.06	0.92	40.31	23.02	3.21
5200	10.14	16.58	8.73	15.06	1.05	0.93	39.70	22.74	3.21
5400	10.05	16.43	8.53	14.99	1.04	0.94	40.26	22.86	3.28
5600	9.91	16.15	8.22	14.62	1.01	0.94	40.00	22.53	3.36
5800	9.79	15.85	7.99	14.48	0.99	0.94	39.70	22.38	3.42
6000	9.76	15.63	7.95	14.51	0.98	0.94	39.71	22.11	3.51
6200	9.72	15.34	7.77	14.28	0.95	0.93	39.62	22.14	3.53
6400	9.71	15.13	7.61	13.73	0.92	0.93	38.89	21.92	3.63
6600	9.74	14.84	7.53	13.70	0.90	0.91	38.81	21.65	3.70
6800	9.63	14.59	7.20	13.52	0.88	0.91	38.86	21.72	3.79
7000	9.50	14.32	6.98	13.47	0.87	0.91	38.29	21.65	3.93
7200	9.38	14.05	6.52	13.51	0.86	0.91	39.10	21.74	4.09
7400	9.11	13.94	6.06	13.19	0.85	0.92	38.08	21.56	4.20
7600	8.68	13.90	5.51	12.59	0.85	0.95	38.05	21.64	4.41
7800	8.22	13.91	4.92	11.79	0.85	0.99	38.14	21.25	4.67
8000	7.59	13.83	4.62	11.17	0.87	1.00	37.75	21.24	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: Vd = 4.75V, Id = 120.33 mA @ 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)
20	19.41	23.76	7.23	9.65	0.89	0.70	37.67	21.43	1.79
30	18.64	22.40	8.93	11.35	0.91	0.67	38.68	22.13	1.84
40	18.06	21.80	10.52	12.99	0.96	0.66	38.18	22.28	1.78
50	17.65	21.39	11.96	14.48	0.99	0.64	38.19	22.02	1.73
60	17.36	21.01	13.18	15.88	1.01	0.62	39.04	21.98	1.77
70	17.17	21.02	14.07	16.84	1.03	0.63	39.03	22.07	1.81
80	17.03	20.96	14.94	17.82	1.05	0.63	39.69	22.10	1.80
90	16.93	20.89	15.70	18.68	1.06	0.63	40.38	22.13	1.79
100	16.84	20.81	16.32	19.41	1.06	0.63	39.97	22.30	1.82
200	16.52	20.66	19.62	23.93	1.10	0.63	42.60	22.02	1.78
400	16.31	20.58	20.35	26.22	1.11	0.64	46.42	22.03	1.99
600	16.10	20.53	19.52	25.91	1.12	0.65	44.65	22.14	2.06
800	15.84	20.45	18.30	25.00	1.12	0.67	42.62	22.07	1.98
1000	15.55	20.34	17.10	23.76	1.13	0.69	41.77	21.94	2.02
1200	15.22	20.21	15.97	22.75	1.13	0.71	41.16	22.11	2.08
1400	14.88	20.07	15.00	21.72	1.14	0.73	41.20	22.08	2.07
1600	14.52	19.92	14.20	20.89	1.15	0.75	40.17	22.21	2.13
1800	14.16	19.74	13.54	20.00	1.15	0.77	39.50	21.98	2.22
2000	13.81	19.60	12.98	19.31	1.15	0.79	39.53	22.08	2.18
2200	13.45	19.42	12.58	18.72	1.16	0.81	39.15	21.96	2.27
2400	13.13	19.21	12.20	18.13	1.15	0.82	39.86	22.25	2.28
2600	12.79	19.01	12.03	17.69	1.16	0.83	39.74	22.30	2.35
2800	12.49	18.82	11.79	17.13	1.16	0.84	39.01	22.13	2.48
3000	12.23	18.62	11.57	16.57	1.15	0.85	39.19	22.18	2.47
3200	11.95	18.44	11.52	16.26	1.15	0.86	39.15	22.39	2.48
3400	11.67	18.20	11.31	16.04	1.15	0.86	38.68	22.23	2.58
3600	11.48	17.99	11.10	15.66	1.14	0.87	38.55	22.30	2.59
3800	11.22	17.88	11.05	15.69	1.15	0.88	38.77	22.30	2.73
4000	11.04	17.62	10.69	15.48	1.13	0.88	38.10	22.28	2.79
4200	10.85	17.42	10.42	15.43	1.13	0.89	38.20	22.28	2.85
4400	10.60	17.17	10.05	15.53	1.12	0.90	38.08	22.13	2.99
4600	10.50	16.95	9.63	15.19	1.09	0.90	38.11	22.29	2.97
4800	10.37	16.81	9.33	15.05	1.08	0.91	37.91	22.16	3.08
5000	10.26	16.68	9.04	14.99	1.06	0.92	38.28	22.38	3.14
5200	10.07	16.47	8.78	15.12	1.06	0.93	37.73	22.08	3.18
5400	9.97	16.36	8.58	15.07	1.05	0.94	38.28	22.18	3.24
5600	9.83	16.04	8.26	14.71	1.02	0.94	37.83	21.90	3.32
5800	9.72	15.79	8.04	14.56	0.99	0.94	37.51	21.76	3.41
6000	9.69	15.54	8.00	14.63	0.98	0.93	37.45	21.48	3.48
6200	9.65	15.26	7.83	14.41	0.95	0.93	37.18	21.55	3.50
6400	9.63	15.06	7.68	13.88	0.93	0.92	36.64	21.31	3.59
6600	9.66	14.75	7.60	13.84	0.91	0.91	36.27	21.06	3.64
6800	9.55	14.53	7.27	13.62	0.89	0.91	36.42	21.11	3.75
7000	9.43	14.26	7.04	13.53	0.88	0.91	36.00	21.01	3.91
7200	9.30	14.00	6.57	13.48	0.86	0.90	36.68	21.15	4.02
7400	9.03	13.92	6.12	13.10	0.86	0.92	35.73	20.91	4.15
7600	8.60	13.87	5.57	12.43	0.86	0.94	35.80	21.04	4.34
7800	8.15	13.86	4.96	11.60	0.86	0.97	35.37	20.59	4.60
8000	7.52	13.80	4.66	10.96	0.87	0.99	35.14	20.60	4.84

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 = 148.69 mA @ 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)
20	19.47	23.72	7.50	9.78	0.90	0.69	37.94	22.56	2.11
30	18.70	22.49	9.23	11.52	0.93	0.66	39.36	23.33	2.05
40	18.13	21.87	10.82	13.20	0.96	0.65	38.78	23.51	2.01
50	17.74	21.39	12.21	14.63	0.99	0.63	38.92	23.26	1.97
60	17.46	21.46	13.51	16.09	1.03	0.65	39.88	23.08	2.00
70	17.28	21.18	14.40	17.10	1.04	0.64	39.76	23.26	2.02
80	17.15	21.08	15.27	18.11	1.05	0.63	40.10	23.29	2.02
90	17.04	21.03	16.02	18.98	1.06	0.63	40.58	23.29	2.01
100	16.97	20.97	16.61	19.75	1.07	0.63	40.71	23.52	2.03
200	16.66	20.80	19.95	24.50	1.10	0.63	42.43	23.20	1.99
400	16.45	20.75	20.63	27.05	1.11	0.64	43.87	23.19	2.20
600	16.24	20.66	19.70	27.04	1.12	0.65	44.26	23.25	2.26
800	15.98	20.58	18.44	26.14	1.12	0.67	46.05	23.20	2.17
1000	15.69	20.48	17.20	24.97	1.13	0.69	44.44	23.05	2.27
1200	15.36	20.38	16.05	23.95	1.14	0.71	46.53	23.24	2.28
1400	15.02	20.21	15.07	22.87	1.14	0.73	46.18	23.21	2.32
1600	14.66	20.09	14.26	22.00	1.15	0.76	45.56	23.36	2.38
1800	14.30	19.94	13.60	21.02	1.16	0.78	45.91	23.17	2.44
2000	13.95	19.74	13.04	20.22	1.16	0.79	43.58	23.30	2.44
2200	13.59	19.59	12.61	19.51	1.16	0.81	45.19	23.11	2.50
2400	13.26	19.37	12.21	18.81	1.16	0.83	44.45	23.47	2.48
2600	12.93	19.23	12.03	18.23	1.17	0.84	43.21	23.52	2.57
2800	12.63	19.01	11.79	17.53	1.16	0.85	42.66	23.33	2.75
3000	12.36	18.80	11.56	16.89	1.16	0.86	43.57	23.36	2.69
3200	12.08	18.64	11.49	16.47	1.16	0.86	42.66	23.58	2.75
3400	11.80	18.41	11.29	16.22	1.16	0.87	41.84	23.42	2.82
3600	11.61	18.19	11.05	15.74	1.15	0.87	41.56	23.48	2.91
3800	11.35	18.10	11.02	15.71	1.16	0.88	41.45	23.45	3.00
4000	11.16	17.83	10.63	15.47	1.14	0.89	41.01	23.43	3.07
4200	10.97	17.64	10.36	15.38	1.13	0.89	41.27	23.43	3.14
4400	10.73	17.35	9.98	15.52	1.12	0.90	40.74	23.26	3.28
4600	10.62	17.14	9.54	15.12	1.09	0.91	40.63	23.41	3.28
4800	10.49	16.99	9.24	14.92	1.08	0.92	40.39	23.28	3.33
5000	10.38	16.89	8.95	14.80	1.06	0.93	40.39	23.50	3.45
5200	10.19	16.68	8.69	14.93	1.05	0.94	40.03	23.20	3.50
5400	10.10	16.52	8.48	14.86	1.04	0.94	40.41	23.34	3.61
5600	9.95	16.19	8.15	14.46	1.01	0.95	39.90	23.00	3.66
5800	9.84	15.94	7.93	14.33	0.99	0.95	39.88	22.85	3.75
6000	9.81	15.71	7.88	14.36	0.97	0.94	39.61	22.55	3.81
6200	9.77	15.39	7.71	14.13	0.94	0.93	39.67	22.61	3.84
6400	9.75	15.18	7.54	13.58	0.92	0.93	38.71	22.36	3.93
6600	9.78	14.89	7.46	13.51	0.90	0.92	38.89	22.12	4.05
6800	9.67	14.65	7.14	13.39	0.88	0.92	39.11	22.15	4.15
7000	9.55	14.36	6.91	13.35	0.86	0.92	38.60	22.07	4.29
7200	9.42	14.09	6.45	13.45	0.85	0.92	39.30	22.21	4.40
7400	9.15	13.97	6.00	13.19	0.85	0.93	38.61	21.98	4.52
7600	8.72	13.95	5.45	12.67	0.85	0.96	38.44	22.12	4.79
7800	8.26	13.92	4.86	11.91	0.84	1.00	38.71	21.70	5.06
8000	7.62	13.85	4.57	11.32	0.86	1.01	38.48	21.53	5.29

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 = 5V, Id = 124.36 mA @ 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)
20	19.62	23.65	6.93	9.20	0.86	0.68	40.89	21.97	1.64
30	18.80	22.31	8.53	10.70	0.87	0.67	41.27	22.63	1.55
40	18.13	21.51	10.06	12.16	0.91	0.64	39.56	22.72	1.46
50	17.65	21.16	11.49	13.39	0.95	0.64	39.01	22.56	1.37
60	17.28	20.72	12.63	14.68	0.98	0.62	38.73	22.43	1.41
70	17.04	20.68	13.68	15.48	1.00	0.62	39.29	22.50	1.45
80	16.86	20.59	14.62	16.32	1.02	0.62	38.20	22.57	1.42
90	16.72	20.49	15.45	17.03	1.04	0.62	38.78	22.58	1.41
100	16.61	20.44	16.14	17.64	1.05	0.62	38.76	22.77	1.42
200	16.20	20.24	20.50	21.05	1.09	0.62	37.66	22.55	1.37
400	15.98	20.20	22.23	22.04	1.11	0.62	37.25	22.61	1.60
600	15.80	20.13	21.26	22.09	1.11	0.63	37.55	22.69	1.60
800	15.59	20.04	19.85	21.68	1.12	0.65	37.89	22.65	1.54
1000	15.34	19.95	18.51	21.32	1.13	0.66	37.76	22.53	1.59
1200	15.06	19.86	17.31	20.89	1.13	0.68	38.34	22.67	1.62
1400	14.76	19.74	16.20	20.63	1.14	0.70	38.66	22.66	1.63
1600	14.45	19.61	15.38	20.51	1.15	0.72	39.34	22.75	1.66
1800	14.14	19.49	14.75	20.13	1.15	0.73	38.31	22.54	1.76
2000	13.83	19.31	14.08	20.01	1.16	0.75	38.94	22.63	1.70
2200	13.51	19.20	13.77	19.96	1.16	0.77	38.44	22.43	1.74
2400	13.22	18.98	13.26	19.97	1.16	0.78	39.89	22.78	1.72
2600	12.93	18.85	13.13	19.77	1.17	0.80	40.44	22.85	1.79
2800	12.66	18.64	12.93	19.30	1.17	0.81	40.37	22.64	1.95
3000	12.41	18.44	12.72	18.69	1.16	0.81	40.31	22.70	1.91
3200	12.17	18.29	12.64	18.39	1.16	0.82	41.67	22.94	1.93
3400	11.89	18.14	12.44	18.52	1.17	0.83	41.25	22.79	2.01
3600	11.74	17.88	12.08	17.87	1.15	0.83	41.17	22.84	2.03
3800	11.50	17.77	12.02	17.80	1.16	0.84	42.82	22.88	2.11
4000	11.32	17.52	11.52	17.62	1.14	0.84	42.63	22.91	2.14
4200	11.15	17.36	11.11	17.40	1.13	0.85	42.19	22.92	2.19
4400	10.89	17.15	10.73	17.73	1.13	0.86	42.61	22.81	2.27
4600	10.78	16.93	10.21	17.06	1.11	0.87	42.96	22.99	2.27
4800	10.66	16.79	9.85	16.56	1.09	0.88	42.71	22.94	2.36
5000	10.55	16.69	9.56	16.39	1.08	0.89	44.21	23.15	2.41
5200	10.39	16.51	9.30	16.33	1.07	0.90	43.47	22.82	2.44
5400	10.30	16.36	9.22	16.01	1.06	0.90	45.37	23.04	2.49
5600	10.16	16.08	9.01	15.58	1.03	0.90	43.74	22.65	2.59
5800	10.11	15.78	8.95	15.64	1.02	0.89	44.28	22.49	2.59
6000	10.14	15.61	8.86	15.14	0.99	0.88	43.76	22.10	2.63
6200	10.16	15.28	8.82	14.99	0.97	0.86	43.65	22.19	2.65
6400	10.17	15.04	8.60	14.82	0.95	0.85	42.01	21.94	2.71
6600	10.20	14.74	8.34	14.83	0.92	0.84	41.75	21.67	2.78
6800	10.19	14.43	7.88	15.16	0.90	0.83	41.83	21.75	2.89
7000	10.06	14.24	7.32	14.89	0.88	0.84	42.05	21.67	3.03
7200	9.96	13.97	6.72	14.80	0.87	0.84	42.40	21.71	3.13
7400	9.63	13.74	6.17	13.94	0.86	0.85	42.64	21.52	3.25
7600	9.19	13.75	5.48	12.76	0.85	0.89	42.53	21.59	3.47
7800	8.83	14.00	4.63	11.46	0.83	0.94	42.18	21.16	3.65
8000	8.19	13.82	4.49	10.88	0.85	0.95	41.96	21.13	3.84

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 = 109.28 mA @ 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)
20	19.54	23.65	6.85	9.09	0.85	0.69	39.02	21.22	1.51
30	18.71	22.20	8.42	10.58	0.87	0.66	39.25	21.87	1.50
40	18.05	21.46	9.94	12.02	0.91	0.65	37.97	21.93	1.38
50	17.56	20.90	11.35	13.30	0.94	0.62	37.92	21.69	1.31
60	17.19	20.92	12.55	14.51	0.99	0.65	38.21	21.67	1.33
70	16.95	20.60	13.55	15.39	1.00	0.63	38.85	21.71	1.39
80	16.77	20.52	14.47	16.25	1.02	0.63	38.33	21.78	1.36
90	16.62	20.41	15.30	16.98	1.03	0.62	38.82	21.80	1.37
100	16.51	20.36	16.00	17.59	1.05	0.62	38.86	21.97	1.36
200	16.10	20.13	20.36	21.19	1.09	0.62	38.47	21.76	1.36
400	15.87	20.08	22.20	22.24	1.11	0.62	37.74	21.84	1.56
600	15.70	20.01	21.25	22.35	1.11	0.63	38.32	21.93	1.59
800	15.48	19.95	19.83	21.88	1.12	0.65	38.57	21.89	1.50
1000	15.24	19.85	18.49	21.50	1.13	0.66	38.85	21.78	1.54
1200	14.97	19.76	17.30	20.97	1.13	0.68	39.20	21.91	1.59
1400	14.67	19.65	16.20	20.66	1.14	0.70	39.61	21.89	1.59
1600	14.36	19.55	15.38	20.51	1.15	0.72	39.77	21.98	1.62
1800	14.05	19.40	14.72	20.05	1.15	0.73	38.77	21.79	1.71
2000	13.74	19.25	14.09	19.87	1.16	0.75	39.04	21.88	1.68
2200	13.43	19.11	13.75	19.78	1.16	0.77	38.50	21.72	1.69
2400	13.14	18.93	13.24	19.76	1.16	0.79	39.76	22.05	1.70
2600	12.85	18.78	13.10	19.51	1.17	0.80	40.32	22.09	1.74
2800	12.58	18.62	12.88	19.03	1.17	0.81	40.35	21.88	1.88
3000	12.33	18.39	12.68	18.44	1.16	0.82	40.11	21.94	1.83
3200	12.10	18.25	12.58	18.19	1.16	0.82	40.89	22.16	1.87
3400	11.82	18.10	12.46	18.28	1.17	0.83	40.22	22.08	1.94
3600	11.67	17.84	12.04	17.69	1.15	0.83	40.32	22.10	1.91
3800	11.44	17.77	11.97	17.64	1.16	0.84	40.93	22.11	2.01
4000	11.25	17.48	11.53	17.43	1.14	0.85	40.24	22.14	2.06
4200	11.08	17.31	11.06	17.23	1.13	0.86	40.14	22.17	2.09
4400	10.83	17.13	10.74	17.53	1.14	0.87	40.14	22.05	2.19
4600	10.71	16.93	10.21	16.91	1.11	0.87	39.92	22.21	2.21
4800	10.58	16.79	9.84	16.41	1.09	0.88	39.73	22.13	2.31
5000	10.49	16.67	9.54	16.27	1.08	0.89	40.48	22.40	2.30
5200	10.32	16.49	9.28	16.20	1.07	0.90	40.24	22.07	2.34
5400	10.25	16.36	9.21	15.91	1.06	0.90	40.58	22.27	2.41
5600	10.09	16.07	9.00	15.48	1.04	0.90	40.20	21.95	2.49
5800	10.06	15.78	8.95	15.58	1.02	0.89	40.24	21.81	2.50
6000	10.07	15.62	8.82	15.09	1.00	0.88	40.64	21.49	2.52
6200	10.09	15.28	8.79	14.96	0.97	0.86	40.12	21.54	2.56
6400	10.11	15.01	8.59	14.80	0.95	0.85	40.17	21.31	2.62
6600	10.14	14.75	8.33	14.83	0.93	0.84	39.67	21.05	2.64
6800	10.13	14.43	7.89	15.11	0.90	0.84	39.06	21.16	2.71
7000	10.00	14.24	7.31	14.83	0.88	0.85	39.28	21.05	2.88
7200	9.90	13.97	6.72	14.71	0.87	0.84	39.89	21.12	2.95
7400	9.56	13.76	6.17	13.84	0.86	0.85	39.15	20.92	3.08
7600	9.12	13.74	5.47	12.66	0.85	0.89	38.99	20.94	3.32
7800	8.78	14.02	4.66	11.36	0.83	0.94	38.67	20.61	3.46
8000	8.14	13.81	4.49	10.79	0.84	0.95	37.95	20.53	3.70

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 = 5.25V, Id = 139.75 mA @ 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)
20	19.68	23.65	7.02	9.31	0.86	0.68	42.88	22.65	1.75
30	18.85	22.29	8.63	10.82	0.87	0.66	42.08	23.27	1.73
40	18.20	21.57	10.16	12.25	0.91	0.64	40.92	23.39	1.56
50	17.71	21.27	11.58	13.50	0.95	0.64	39.71	23.23	1.46
60	17.35	20.84	12.87	14.75	0.98	0.62	39.18	23.10	1.49
70	17.12	20.73	13.81	15.59	1.00	0.62	39.09	23.20	1.52
80	16.94	20.64	14.74	16.40	1.02	0.62	38.67	23.26	1.50
90	16.80	20.56	15.56	17.10	1.04	0.62	38.54	23.27	1.48
100	16.69	20.51	16.27	17.72	1.05	0.62	38.68	23.46	1.47
200	16.29	20.33	20.59	21.04	1.09	0.61	37.43	23.21	1.42
400	16.07	20.27	22.30	21.92	1.11	0.62	37.01	23.27	1.63
600	15.89	20.20	21.27	22.07	1.11	0.63	37.38	23.35	1.67
800	15.67	20.10	19.86	21.64	1.12	0.64	37.61	23.30	1.60
1000	15.43	20.02	18.50	21.32	1.13	0.66	37.51	23.17	1.63
1200	15.14	19.92	17.29	20.90	1.13	0.68	38.15	23.33	1.66
1400	14.84	19.80	16.19	20.67	1.14	0.70	38.36	23.29	1.69
1600	14.53	19.67	15.36	20.63	1.15	0.71	39.18	23.43	1.72
1800	14.21	19.53	14.71	20.27	1.15	0.73	38.25	23.19	1.78
2000	13.90	19.38	14.07	20.17	1.16	0.75	38.79	23.27	1.77
2200	13.58	19.24	13.75	20.15	1.16	0.77	38.35	23.09	1.80
2400	13.29	19.05	13.25	20.19	1.16	0.78	39.48	23.41	1.82
2600	12.99	18.88	13.12	19.95	1.17	0.80	40.48	23.47	1.87
2800	12.72	18.69	12.91	19.45	1.16	0.81	40.15	23.30	1.99
3000	12.48	18.47	12.71	18.84	1.16	0.81	40.51	23.31	1.97
3200	12.23	18.34	12.64	18.55	1.16	0.82	41.01	23.63	1.98
3400	11.95	18.15	12.44	18.66	1.17	0.83	41.28	23.50	2.04
3600	11.79	17.90	12.08	17.97	1.15	0.83	41.28	23.50	2.07
3800	11.56	17.84	12.01	17.92	1.16	0.84	42.41	23.56	2.18
4000	11.38	17.54	11.52	17.73	1.14	0.84	42.65	23.57	2.20
4200	11.20	17.36	11.12	17.47	1.13	0.85	42.85	23.62	2.32
4400	10.94	17.21	10.73	17.81	1.13	0.86	42.45	23.47	2.37
4600	10.83	16.97	10.20	17.22	1.11	0.87	43.18	23.65	2.38
4800	10.71	16.79	9.83	16.69	1.09	0.88	44.68	23.59	2.46
5000	10.61	16.71	9.56	16.44	1.08	0.89	46.07	23.81	2.53
5200	10.44	16.52	9.30	16.39	1.07	0.90	43.20	23.49	2.58
5400	10.36	16.42	9.22	15.95	1.06	0.90	45.20	23.69	2.63
5600	10.20	16.13	9.00	15.76	1.04	0.90	43.40	23.25	2.69
5800	10.16	15.89	8.96	15.59	1.02	0.89	42.99	23.09	2.70
6000	10.18	15.59	8.82	15.14	0.99	0.88	41.91	22.72	2.86
6200	10.19	15.30	8.79	14.91	0.97	0.86	41.65	22.79	2.75
6400	10.22	15.03	8.58	14.80	0.94	0.85	39.89	22.57	2.86
6600	10.27	14.75	8.35	14.86	0.92	0.83	40.00	22.22	2.89
6800	10.23	14.42	7.86	15.11	0.90	0.83	41.10	22.35	2.98
7000	10.11	14.24	7.28	14.90	0.88	0.84	40.27	22.22	3.12
7200	10.03	13.95	6.74	14.96	0.87	0.83	40.24	22.27	3.25
7400	9.64	13.79	6.12	13.77	0.86	0.85	40.45	22.12	3.38
7600	9.28	13.82	5.26	12.60	0.84	0.90	40.38	22.12	3.63
7800	8.89	14.06	4.66	11.61	0.84	0.94	41.35	21.72	3.77
8000	8.24	13.80	4.46	10.95	0.84	0.95	40.55	21.63	3.98

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 = 5V, Id = 135.70 mA @ 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)
20	19.18	23.70	7.80	9.96	0.93	0.69	36.02	21.96	2.44
30	18.46	22.59	9.56	11.81	0.96	0.67	37.09	22.65	2.38
40	17.96	22.00	11.12	13.55	1.00	0.66	37.10	22.82	2.34
50	17.63	21.58	12.53	15.11	1.02	0.64	37.05	22.53	2.29
60	17.38	21.34	13.52	16.54	1.04	0.64	37.64	22.46	2.33
70	17.24	21.38	14.44	17.59	1.06	0.65	37.92	22.60	2.34
80	17.13	21.26	15.20	18.64	1.07	0.64	38.00	22.63	2.33
90	17.04	21.24	15.84	19.55	1.08	0.65	38.60	22.62	2.34
100	16.98	21.18	16.35	20.33	1.09	0.64	38.47	22.81	2.32
200	16.72	21.05	18.75	25.26	1.11	0.65	40.34	22.50	2.30
400	16.51	20.98	18.86	28.11	1.12	0.66	40.52	22.49	2.51
600	16.28	20.92	18.10	28.01	1.13	0.68	40.64	22.56	2.55
800	16.01	20.81	17.11	26.69	1.13	0.69	40.29	22.51	2.49
1000	15.69	20.69	16.06	25.06	1.14	0.72	40.27	22.36	2.57
1200	15.34	20.54	15.10	23.59	1.14	0.74	39.65	22.54	2.64
1400	14.96	20.38	14.25	22.11	1.15	0.76	39.43	22.53	2.64
1600	14.58	20.25	13.51	20.88	1.15	0.78	38.95	22.67	2.70
1800	14.19	20.05	12.88	19.67	1.15	0.80	38.44	22.49	2.81
2000	13.82	19.88	12.34	18.74	1.16	0.82	38.57	22.62	2.80
2200	13.44	19.69	11.93	17.90	1.16	0.84	38.73	22.43	2.89
2400	13.09	19.50	11.55	17.14	1.16	0.85	38.61	22.77	2.87
2600	12.74	19.34	11.34	16.55	1.16	0.87	38.47	22.78	3.00
2800	12.43	19.14	11.10	15.97	1.16	0.88	38.09	22.58	3.13
3000	12.14	18.93	10.87	15.44	1.16	0.89	38.27	22.66	3.13
3200	11.85	18.76	10.81	15.05	1.16	0.89	37.97	22.78	3.18
3400	11.56	18.53	10.63	14.84	1.16	0.90	37.61	22.56	3.25
3600	11.35	18.30	10.43	14.47	1.14	0.90	37.59	22.66	3.28
3800	11.10	18.15	10.36	14.38	1.15	0.91	37.64	22.64	3.38
4000	10.89	17.93	10.15	14.33	1.14	0.91	37.18	22.56	3.47
4200	10.66	17.74	9.93	14.41	1.14	0.92	37.34	22.53	3.53
4400	10.50	17.35	9.43	14.13	1.10	0.92	37.36	22.43	3.64
4600	10.37	17.20	9.18	14.02	1.09	0.93	37.15	22.52	3.68
4800	10.24	17.10	8.97	13.99	1.08	0.94	37.05	22.41	3.76
5000	10.11	16.97	8.69	14.00	1.07	0.95	37.37	22.56	3.89
5200	9.89	16.64	8.29	13.94	1.04	0.96	36.81	22.30	3.91
5400	9.77	16.49	8.17	14.04	1.04	0.97	37.14	22.38	3.97
5600	9.69	16.29	7.91	13.78	1.01	0.97	36.86	22.12	4.10
5800	9.55	15.99	7.62	13.28	0.98	0.98	36.65	21.98	4.18
6000	9.47	15.71	7.52	13.33	0.96	0.97	36.40	21.69	4.27
6200	9.43	15.47	7.34	13.12	0.93	0.97	36.39	21.74	4.30
6400	9.36	15.27	7.18	12.61	0.91	0.97	35.83	21.50	4.42
6600	9.36	14.92	7.12	12.80	0.89	0.96	35.48	21.27	4.49
6800	9.25	14.65	6.94	12.51	0.87	0.95	35.75	21.27	4.62
7000	9.09	14.41	6.68	12.63	0.86	0.96	35.34	21.26	4.76
7200	8.88	14.17	6.36	12.70	0.85	0.96	35.79	21.26	4.91
7400	8.60	14.13	5.93	12.46	0.85	0.98	35.12	21.12	5.03
7600	8.16	13.98	5.55	12.26	0.86	1.00	34.95	21.15	5.27
7800	7.69	13.96	5.04	11.78	0.87	1.03	35.12	20.84	5.51
8000	6.99	13.83	4.93	11.36	0.90	1.03	34.45	20.68	5.76

MMIC Amplifier

PHA-1H-6+

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 = 123.59 mA @ 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)
20	19.18	23.65	7.60	9.87	0.93	0.69	35.55	21.43	2.22
30	18.46	22.48	9.34	11.74	0.95	0.67	36.97	22.07	2.22
40	17.95	21.95	10.90	13.47	0.99	0.66	36.80	22.23	2.15
50	17.60	21.52	12.21	14.93	1.01	0.64	36.83	22.02	2.11
60	17.36	21.57	13.43	16.49	1.05	0.66	37.69	21.89	2.14
70	17.21	21.32	14.20	17.52	1.06	0.65	37.60	22.02	2.16
80	17.10	21.23	14.98	18.57	1.07	0.65	38.37	22.03	2.15
90	17.01	21.17	15.60	19.46	1.08	0.64	38.57	22.05	2.17
100	16.95	21.13	16.09	20.24	1.08	0.64	38.17	22.21	2.15
200	16.68	20.96	18.51	25.10	1.11	0.64	39.77	21.94	2.16
400	16.47	20.93	18.63	27.71	1.12	0.66	40.37	21.93	2.36
600	16.24	20.82	17.90	27.43	1.12	0.67	40.17	22.00	2.39
800	15.96	20.72	16.94	26.01	1.13	0.69	39.35	21.96	2.33
1000	15.64	20.60	15.94	24.37	1.13	0.71	39.16	21.81	2.41
1200	15.29	20.47	15.00	22.89	1.14	0.74	38.43	21.98	2.45
1400	14.91	20.29	14.16	21.48	1.14	0.76	38.30	21.97	2.48
1600	14.52	20.14	13.44	20.35	1.15	0.78	37.83	22.09	2.56
1800	14.13	19.96	12.82	19.19	1.15	0.80	37.30	21.94	2.62
2000	13.76	19.78	12.28	18.33	1.15	0.82	37.36	22.06	2.61
2200	13.38	19.60	11.89	17.56	1.15	0.84	37.05	21.85	2.71
2400	13.03	19.38	11.52	16.88	1.15	0.85	37.44	22.20	2.77
2600	12.68	19.22	11.31	16.34	1.15	0.86	37.44	22.21	2.77
2800	12.37	19.02	11.08	15.81	1.15	0.87	36.92	22.05	2.89
3000	12.08	18.79	10.88	15.32	1.15	0.88	37.11	22.10	2.91
3200	11.79	18.63	10.81	15.00	1.15	0.89	36.96	22.23	2.97
3400	11.50	18.40	10.65	14.83	1.15	0.89	36.69	22.08	3.09
3600	11.30	18.17	10.44	14.47	1.14	0.90	36.65	22.14	3.12
3800	11.04	18.01	10.38	14.42	1.14	0.90	36.72	22.09	3.21
4000	10.83	17.78	10.18	14.37	1.13	0.91	36.19	22.07	3.29
4200	10.61	17.58	9.97	14.46	1.13	0.91	36.40	22.01	3.34
4400	10.44	17.20	9.47	14.20	1.09	0.92	36.24	21.92	3.46
4600	10.31	17.08	9.22	14.10	1.08	0.93	36.27	21.98	3.48
4800	10.18	16.99	9.01	14.10	1.08	0.94	36.03	21.91	3.60
5000	10.05	16.86	8.75	14.15	1.07	0.95	36.50	22.01	3.68
5200	9.83	16.50	8.33	14.05	1.04	0.96	35.93	21.79	3.72
5400	9.71	16.37	8.22	14.16	1.04	0.96	36.42	21.88	3.81
5600	9.63	16.17	7.97	13.93	1.01	0.97	35.87	21.60	3.88
5800	9.49	15.86	7.67	13.45	0.98	0.97	35.74	21.50	3.97
6000	9.41	15.61	7.58	13.49	0.96	0.97	35.52	21.20	4.05
6200	9.37	15.36	7.43	13.28	0.94	0.96	35.31	21.29	4.13
6400	9.31	15.15	7.26	12.77	0.91	0.96	34.73	21.03	4.22
6600	9.30	14.82	7.20	12.95	0.90	0.95	34.39	20.80	4.28
6800	9.19	14.57	7.01	12.65	0.88	0.95	34.47	20.83	4.38
7000	9.03	14.34	6.76	12.75	0.87	0.95	34.25	20.78	4.56
7200	8.82	14.12	6.44	12.77	0.86	0.95	34.77	20.81	4.70
7400	8.54	14.05	5.99	12.40	0.86	0.97	34.01	20.68	4.77
7600	8.10	13.89	5.61	12.14	0.87	0.99	33.88	20.69	5.04
7800	7.63	13.93	5.11	11.61	0.88	1.01	33.91	20.30	5.28
8000	6.93	13.79	4.98	11.15	0.91	1.02	33.40	20.16	5.52



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REV. OR
PHA-1H-6+
9/13/2021
Page 8 of 12

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 = 146.96 mA @ 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)
20	19.14	23.66	8.02	10.02	0.94	0.68	35.50	22.47	2.74
30	18.43	22.62	9.79	11.87	0.97	0.67	36.75	23.11	2.68
40	17.94	21.96	11.38	13.61	1.00	0.65	36.89	23.29	2.58
50	17.61	21.81	12.71	15.17	1.03	0.66	36.63	23.17	2.52
60	17.37	21.37	13.89	16.63	1.05	0.64	37.25	22.93	2.54
70	17.23	21.39	14.68	17.66	1.06	0.65	37.49	23.08	2.56
80	17.12	21.30	15.47	18.73	1.07	0.64	37.78	23.08	2.57
90	17.04	21.25	16.09	19.63	1.08	0.64	38.23	23.07	2.56
100	16.98	21.19	16.59	20.45	1.09	0.64	38.25	23.30	2.54
200	16.73	21.11	19.01	25.35	1.11	0.65	39.80	22.96	2.49
400	16.52	21.03	19.08	28.27	1.12	0.66	39.59	22.96	2.72
600	16.29	20.92	18.24	28.42	1.13	0.67	39.81	23.01	2.76
800	16.02	20.85	17.21	27.11	1.13	0.70	39.93	22.94	2.72
1000	15.70	20.73	16.15	25.56	1.14	0.72	40.17	22.84	2.78
1200	15.35	20.60	15.15	24.03	1.15	0.74	39.56	23.01	2.84
1400	14.98	20.49	14.30	22.52	1.15	0.77	39.55	23.00	2.85
1600	14.59	20.29	13.55	21.24	1.16	0.78	39.28	23.15	2.91
1800	14.21	20.14	12.90	19.98	1.16	0.81	38.87	22.99	3.01
2000	13.84	19.92	12.37	18.97	1.16	0.82	38.67	23.13	3.03
2200	13.46	19.81	11.95	18.11	1.17	0.84	39.36	22.90	3.08
2400	13.12	19.59	11.54	17.28	1.16	0.86	39.01	23.27	3.09
2600	12.76	19.41	11.32	16.63	1.17	0.87	38.83	23.27	3.19
2800	12.45	19.25	11.08	16.01	1.17	0.88	38.40	23.08	3.33
3000	12.16	19.03	10.86	15.44	1.16	0.89	38.81	23.12	3.30
3200	11.87	18.88	10.79	15.02	1.17	0.90	38.42	23.22	3.39
3400	11.58	18.61	10.61	14.80	1.16	0.90	38.05	23.07	3.45
3600	11.38	18.43	10.40	14.38	1.15	0.91	38.06	23.11	3.52
3800	11.12	18.26	10.32	14.29	1.15	0.91	37.89	23.07	3.62
4000	10.91	18.04	10.11	14.20	1.15	0.92	37.60	23.03	3.66
4200	10.69	17.85	9.89	14.26	1.14	0.92	37.95	22.95	3.78
4400	10.51	17.46	9.39	14.01	1.10	0.93	37.46	22.83	3.86
4600	10.39	17.30	9.13	13.87	1.09	0.94	37.56	22.90	3.88
4800	10.26	17.18	8.90	13.82	1.08	0.94	37.41	22.77	4.01
5000	10.13	17.09	8.63	13.81	1.07	0.96	37.41	22.92	4.10
5200	9.91	16.73	8.23	13.77	1.04	0.97	37.24	22.74	4.14
5400	9.79	16.58	8.10	13.85	1.03	0.97	37.35	22.76	4.24
5600	9.71	16.36	7.83	13.59	1.01	0.98	37.16	22.49	4.31
5800	9.57	16.07	7.54	13.13	0.97	0.98	37.19	22.39	4.43
6000	9.49	15.78	7.44	13.18	0.96	0.98	36.99	22.10	4.49
6200	9.45	15.53	7.28	12.95	0.93	0.98	36.94	22.15	4.58
6400	9.38	15.31	7.11	12.44	0.90	0.98	36.43	21.92	4.67
6600	9.38	14.98	7.04	12.62	0.88	0.96	36.32	21.67	4.77
6800	9.26	14.71	6.85	12.31	0.86	0.96	36.42	21.67	4.86
7000	9.10	14.46	6.60	12.50	0.85	0.97	36.18	21.62	5.05
7200	8.90	14.22	6.28	12.61	0.85	0.97	36.38	21.59	5.22
7400	8.61	14.15	5.85	12.43	0.84	0.99	35.94	21.48	5.31
7600	8.17	14.01	5.48	12.28	0.85	1.01	35.78	21.51	5.56
7800	7.70	13.99	4.99	11.87	0.86	1.04	36.00	21.16	5.80
8000	6.99	13.87	4.89	11.47	0.90	1.04	35.35	20.85	6.08

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 = 5V, Id = 133.86 mA @ Temperature = +105degC

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)
20	19.04	23.73	8.02	10.00	0.95	0.69	35.14	21.96	2.77
30	18.34	22.57	9.78	11.88	0.98	0.67	36.23	22.54	2.71
40	17.87	22.00	11.32	13.64	1.01	0.66	36.44	22.76	2.62
50	17.55	21.82	12.60	15.13	1.04	0.67	36.34	22.53	2.59
60	17.33	21.53	13.80	16.66	1.06	0.65	37.05	22.36	2.59
70	17.19	21.42	14.53	17.65	1.07	0.65	36.75	22.52	2.59
80	17.09	21.38	15.24	18.66	1.08	0.65	36.98	22.55	2.58
90	17.02	21.30	15.83	19.57	1.09	0.65	37.52	22.56	2.63
100	16.96	21.25	16.31	20.33	1.09	0.65	37.33	22.75	2.58
200	16.72	21.12	18.47	24.78	1.11	0.65	38.61	22.42	2.57
400	16.50	21.05	18.36	26.97	1.12	0.66	38.49	22.40	2.76
600	16.27	21.00	17.61	26.95	1.13	0.68	38.58	22.46	2.83
800	15.99	20.88	16.68	25.75	1.14	0.70	38.57	22.42	2.78
1000	15.66	20.76	15.75	24.31	1.14	0.72	38.63	22.28	2.80
1200	15.31	20.62	14.83	22.85	1.15	0.75	38.13	22.45	2.89
1400	14.93	20.46	14.02	21.51	1.15	0.77	38.18	22.46	2.91
1600	14.53	20.29	13.30	20.29	1.15	0.79	37.67	22.59	2.99
1800	14.14	20.13	12.67	19.17	1.16	0.81	37.18	22.45	3.07
2000	13.76	19.92	12.13	18.21	1.16	0.83	37.41	22.54	3.06
2200	13.37	19.76	11.74	17.40	1.16	0.85	37.33	22.36	3.14
2400	13.02	19.54	11.32	16.65	1.16	0.87	37.54	22.65	3.20
2600	12.66	19.41	11.11	16.10	1.17	0.88	37.44	22.65	3.23
2800	12.34	19.19	10.86	15.49	1.16	0.89	37.06	22.48	3.38
3000	12.04	18.98	10.66	14.96	1.16	0.90	37.20	22.54	3.40
3200	11.75	18.82	10.55	14.55	1.16	0.90	36.92	22.59	3.37
3400	11.45	18.62	10.41	14.39	1.16	0.91	36.68	22.44	3.55
3600	11.24	18.39	10.19	13.99	1.15	0.91	36.56	22.49	3.55
3800	10.99	18.21	10.14	13.90	1.15	0.92	36.71	22.42	3.66
4000	10.78	18.01	9.95	13.80	1.14	0.92	36.13	22.36	3.76
4200	10.55	17.80	9.81	13.92	1.14	0.93	36.49	22.29	3.84
4400	10.37	17.39	9.36	13.79	1.10	0.93	36.23	22.16	3.92
4600	10.25	17.26	9.10	13.65	1.09	0.94	36.23	22.28	3.94
4800	10.13	17.12	8.88	13.66	1.08	0.95	36.15	22.12	4.08
5000	10.00	16.98	8.58	13.71	1.07	0.96	36.30	22.30	4.15
5200	9.78	16.66	8.15	13.69	1.04	0.97	35.88	22.08	4.18
5400	9.67	16.54	7.99	13.76	1.03	0.98	36.23	22.09	4.32
5600	9.55	16.31	7.71	13.62	1.01	0.99	35.91	21.85	4.41
5800	9.40	16.02	7.38	13.16	0.97	0.99	35.82	21.77	4.50
6000	9.34	15.81	7.27	13.21	0.96	0.99	35.55	21.41	4.60
6200	9.25	15.53	7.06	12.99	0.93	1.00	35.61	21.57	4.65
6400	9.16	15.32	6.89	12.49	0.90	1.00	34.94	21.26	4.76
6600	9.16	14.97	6.86	12.59	0.89	0.98	34.81	21.04	4.81
6800	9.04	14.72	6.72	12.34	0.87	0.98	34.82	21.03	5.00
7000	8.87	14.48	6.52	12.49	0.86	0.98	34.58	21.03	5.10
7200	8.68	14.23	6.27	12.63	0.86	0.99	34.91	20.98	5.25
7400	8.42	14.18	5.90	12.46	0.86	1.00	34.29	20.80	5.31
7600	7.98	14.02	5.54	12.39	0.87	1.02	34.13	20.85	5.56
7800	7.51	14.03	5.10	11.97	0.88	1.04	34.39	20.53	5.81
8000	6.80	13.82	4.92	11.41	0.91	1.05	33.71	20.30	6.12

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 = 122.85 mA @ Temperature = +105degC

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)
20	19.06	23.76	7.78	9.98	0.94	0.70	35.17	21.37	2.49
30	18.36	22.56	9.52	11.84	0.97	0.67	36.16	22.03	2.48
40	17.87	22.01	11.05	13.59	1.00	0.67	36.39	22.19	2.37
50	17.55	21.62	12.39	15.16	1.03	0.65	36.25	21.96	2.33
60	17.32	21.51	13.41	16.51	1.05	0.65	36.78	21.88	2.37
70	17.18	21.38	14.24	17.59	1.07	0.65	36.74	21.99	2.39
80	17.08	21.30	14.95	18.60	1.08	0.65	37.13	21.99	2.37
90	17.00	21.27	15.54	19.49	1.08	0.65	37.51	22.00	2.44
100	16.94	21.23	16.01	20.27	1.09	0.65	37.32	22.22	2.37
200	16.70	21.07	18.20	24.78	1.11	0.65	38.56	21.89	2.35
400	16.48	21.02	18.13	26.91	1.12	0.66	38.78	21.85	2.57
600	16.25	20.91	17.37	26.65	1.13	0.68	38.53	21.92	2.62
800	15.96	20.81	16.50	25.32	1.13	0.70	38.12	21.90	2.58
1000	15.63	20.69	15.60	23.80	1.14	0.72	38.05	21.76	2.63
1200	15.27	20.51	14.72	22.35	1.14	0.74	37.46	21.94	2.71
1400	14.89	20.38	13.92	21.01	1.14	0.77	37.33	21.91	2.71
1600	14.49	20.18	13.23	19.83	1.14	0.79	37.00	22.06	2.80
1800	14.10	20.03	12.62	18.78	1.15	0.81	36.44	21.89	2.89
2000	13.72	19.82	12.07	17.88	1.15	0.83	36.62	22.02	2.87
2200	13.33	19.67	11.69	17.14	1.15	0.85	36.40	21.83	2.95
2400	12.97	19.45	11.30	16.44	1.15	0.86	36.78	22.13	2.99
2600	12.61	19.26	11.10	15.92	1.15	0.87	36.72	22.13	3.02
2800	12.29	19.09	10.85	15.37	1.15	0.89	36.27	21.96	3.22
3000	11.99	18.85	10.64	14.90	1.15	0.89	36.35	22.00	3.20
3200	11.70	18.69	10.55	14.52	1.15	0.90	36.29	22.08	3.22
3400	11.41	18.46	10.43	14.37	1.15	0.91	35.96	21.95	3.33
3600	11.20	18.23	10.21	14.02	1.14	0.91	35.86	21.99	3.39
3800	10.95	18.07	10.17	13.95	1.14	0.91	36.03	21.94	3.47
4000	10.74	17.84	10.00	13.90	1.13	0.92	35.56	21.90	3.54
4200	10.51	17.63	9.86	14.04	1.13	0.92	35.81	21.86	3.60
4400	10.32	17.25	9.39	13.87	1.10	0.93	35.59	21.74	3.74
4600	10.21	17.10	9.15	13.77	1.08	0.93	35.64	21.82	3.74
4800	10.08	17.00	8.93	13.81	1.08	0.94	35.52	21.69	3.82
5000	9.95	16.86	8.63	13.88	1.07	0.95	35.86	21.87	3.93
5200	9.73	16.53	8.20	13.82	1.04	0.97	35.25	21.62	3.96
5400	9.62	16.43	8.05	13.92	1.04	0.97	35.65	21.64	4.09
5600	9.50	16.20	7.77	13.77	1.01	0.98	35.21	21.41	4.14
5800	9.35	15.92	7.45	13.30	0.98	0.99	35.03	21.34	4.26
6000	9.29	15.71	7.34	13.38	0.96	0.99	34.85	21.05	4.41
6200	9.20	15.42	7.13	13.13	0.94	0.99	34.79	21.11	4.41
6400	9.12	15.22	6.97	12.65	0.91	0.99	34.05	20.86	4.52
6600	9.12	14.90	6.95	12.77	0.89	0.97	33.86	20.63	4.58
6800	9.00	14.63	6.80	12.51	0.88	0.97	33.89	20.65	4.71
7000	8.83	14.41	6.61	12.60	0.87	0.97	33.70	20.59	4.83
7200	8.64	14.16	6.35	12.71	0.87	0.98	34.16	20.57	5.02
7400	8.37	14.13	5.97	12.45	0.87	0.99	33.47	20.38	5.03
7600	7.93	13.95	5.63	12.28	0.88	1.00	33.35	20.43	5.29
7800	7.46	14.01	5.16	11.82	0.89	1.03	33.49	20.11	5.52
8000	6.76	13.77	4.96	11.25	0.92	1.03	32.91	19.87	5.83

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 = 143.97 mA @ Temperature = +105degC

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)
20	18.98	23.74	8.28	10.07	0.97	0.69	34.90	22.32	3.07
30	18.30	22.55	10.05	11.94	0.98	0.67	35.87	23.02	2.99
40	17.83	22.03	11.62	13.72	1.02	0.66	36.28	23.22	2.85
50	17.52	21.82	12.92	15.26	1.05	0.66	36.15	22.97	2.80
60	17.30	21.42	14.02	16.66	1.06	0.64	36.42	22.84	2.84
70	17.17	21.46	14.83	17.67	1.08	0.65	36.77	22.99	2.82
80	17.07	21.39	15.55	18.70	1.09	0.65	36.66	23.02	2.83
90	17.00	21.33	16.15	19.58	1.09	0.65	37.36	23.00	2.85
100	16.94	21.32	16.62	20.34	1.10	0.65	37.17	23.22	2.82
200	16.71	21.16	18.82	24.77	1.12	0.65	38.42	22.89	2.77
400	16.49	21.13	18.64	26.78	1.13	0.67	38.19	22.86	2.99
600	16.26	21.02	17.76	26.98	1.13	0.68	38.32	22.89	3.04
800	15.98	20.92	16.84	25.88	1.14	0.70	38.28	22.86	2.99
1000	15.66	20.81	15.85	24.55	1.15	0.73	38.62	22.72	3.04
1200	15.30	20.65	14.91	23.17	1.15	0.75	38.10	22.93	3.10
1400	14.93	20.54	14.09	21.78	1.16	0.77	38.21	22.91	3.14
1600	14.54	20.37	13.35	20.54	1.16	0.80	37.79	23.04	3.24
1800	14.14	20.18	12.72	19.37	1.16	0.82	37.36	22.90	3.33
2000	13.77	20.03	12.16	18.39	1.17	0.84	37.51	23.01	3.31
2200	13.38	19.88	11.77	17.55	1.17	0.86	37.79	22.80	3.36
2400	13.03	19.65	11.33	16.75	1.17	0.87	37.62	23.12	3.39
2600	12.67	19.48	11.12	16.14	1.17	0.88	37.78	23.10	3.43
2800	12.35	19.30	10.86	15.51	1.17	0.89	37.38	22.91	3.61
3000	12.05	19.08	10.64	14.95	1.16	0.90	37.38	22.96	3.61
3200	11.76	18.90	10.53	14.50	1.16	0.91	37.17	23.03	3.69
3400	11.46	18.71	10.39	14.31	1.17	0.91	37.04	22.83	3.75
3600	11.25	18.46	10.17	13.91	1.15	0.92	36.97	22.90	3.79
3800	11.00	18.31	10.10	13.77	1.15	0.92	36.94	22.82	3.89
4000	10.79	18.10	9.92	13.68	1.15	0.93	36.64	22.77	3.97
4200	10.56	17.90	9.77	13.79	1.15	0.93	36.75	22.70	4.05
4400	10.37	17.49	9.31	13.64	1.11	0.94	36.54	22.57	4.15
4600	10.26	17.34	9.05	13.51	1.09	0.94	36.46	22.66	4.18
4800	10.13	17.25	8.83	13.49	1.09	0.95	36.36	22.49	4.24
5000	10.00	17.07	8.52	13.54	1.07	0.96	36.40	22.66	4.39
5200	9.79	16.75	8.10	13.51	1.04	0.98	36.17	22.44	4.45
5400	9.68	16.65	7.92	13.59	1.03	0.98	36.35	22.42	4.56
5600	9.56	16.41	7.64	13.41	1.01	0.99	36.25	22.18	4.63
5800	9.40	16.11	7.31	13.00	0.97	1.00	36.18	22.10	4.72
6000	9.35	15.89	7.21	13.03	0.96	1.00	35.89	21.79	4.86
6200	9.25	15.58	6.99	12.81	0.93	1.00	35.99	21.91	4.90
6400	9.16	15.39	6.82	12.30	0.90	1.00	35.32	21.60	4.99
6600	9.17	15.04	6.79	12.41	0.88	0.99	35.34	21.39	5.07
6800	9.04	14.78	6.65	12.18	0.86	0.99	35.37	21.37	5.19
7000	8.87	14.53	6.45	12.33	0.85	0.99	35.19	21.33	5.36
7200	8.69	14.26	6.20	12.50	0.85	1.00	35.45	21.33	5.53
7400	8.42	14.20	5.82	12.41	0.85	1.01	34.86	21.18	5.64
7600	7.97	14.05	5.50	12.39	0.86	1.03	34.68	21.25	5.83
7800	7.50	14.07	5.05	12.04	0.88	1.05	35.01	20.86	6.09
8000	6.80	13.85	4.86	11.53	0.90	1.06	34.27	20.50	6.40