Typical Performance Data

Note: The following data was taken on the Mini-Circuits Characterization Test Board MB-225-63C+ (Figure 2).

Definitions:
Input Return Loss = S11 (dB)
Gain = S21 (dB)
Isolation = S12 (dB)
Output Return Loss = S22 (dB)

TEST CONDITIONS: I_{DD} = 60.7mA, V_{DD} = 4.75V @Temperature = +25degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		1dB Comp. Output	Noise Figure	IP3 - Min
(MHz)	(dB)	(dB)	(dB)	(dB)	K	B1	(dBm)	(dB)	(dBm)
10	24.38	27.83	11.16	6.20	0.87	0.35	18.23	3.31	34.38
20	23.28	25.61	13.43	8.91	0.89	0.39	17.89	3.31	32.20
50	21.97	24.58	17.97	14.49	0.99	0.47	17.71	3.40	32.28
100	21.63	24.42	20.45	18.18	1.02	0.49	17.90	3.46	33.79
200	21.53	24.31	21.59	19.92	1.03	0.48	17.82	3.44	33.76
300	21.51	24.25	21.68	20.38	1.03	0.47	17.93	3.43	32.15
400	21.52	24.23	21.92	20.29	1.03	0.47	17.87	3.39	33.18
500	21.50	24.18	22.44	20.11	1.03	0.46	18.03	3.40	33.00
600	21.49	24.13	22.68	19.86	1.03	0.45	18.13	3.36	32.97
700	21.48	24.06	23.19	19.53	1.03	0.44	18.03	3.37	32.56
800	21.47	23.98	23.71	19.07	1.03	0.43	18.00	3.40	33.50
900	21.46	23.92	24.48	18.70	1.03	0.42	18.03	3.36	32.82
1000	21.44	23.86	25.27	18.45	1.03	0.41	18.10	3.36	32.63
1100	21.42	23.77	26.17	18.06	1.03	0.40	18.26	3.31	32.72
1200	21.39	23.67	27.41	17.72	1.03	0.39	18.11	3.32	32.11
1300	21.35	23.58	28.55	17.35	1.02	0.38	18.12	3.30	31.77
1400	21.31	23.50	30.16	17.09	1.02	0.37	18.50	3.22	32.29
1500	21.26	23.38	32.07	16.75	1.02	0.36	18.24	3.22	32.29
1600	21.21	23.30	35.51	16.57	1.02	0.36	18.33	3.19	32.10
1700	21.14	23.19	38.66	16.37	1.01	0.35	17.87	3.23	31.32
1800	21.07	23.10	43.23	16.09	1.01	0.35	18.27	3.20	31.08
1900	20.99	22.97	44.90	15.78	1.01	0.34	18.24	3.18	31.36
2000	20.90	22.89	40.70	15.71	1.01	0.34	18.23	3.18	30.73
2100	20.80	22.80	35.23	15.55	1.01	0.35	17.94	3.16	30.92
2200	20.69	22.68	32.53	15.37	1.00	0.35	17.89	3.15	31.37
2300	20.57	22.60	30.27	15.28	1.00	0.35	17.78	3.12	31.11
2400	20.44	22.53	28.38	15.17	1.00	0.36	17.41	3.20	30.42
2500	20.32	22.44	27.02	15.05	1.00	0.37	17.15	3.14	29.83
2600	20.18	22.38	26.00	14.91	1.00	0.38	16.86	3.11	29.86
2700	20.04	22.28	25.00	14.83	1.00	0.39	16.94	3.14	30.02
2800	19.90	22.20	24.06	14.80	1.00	0.40	16.65	3.12	29.64
2900	19.75	22.12	23.18	14.78	1.00	0.41	16.57	3.14	29.48
3000	19.59	22.06	22.40	14.71	1.00	0.43	16.11	3.11	28.66
3100	19.44	21.99	21.66	14.66	1.00	0.44	15.69	3.14	28.34
3200	19.28	21.90	20.97	14.64	1.00	0.45	15.94	3.15	29.28
3300	19.11	21.88	20.46	14.58	1.00	0.47	15.86	3.16	28.92
3400	18.94	21.82	19.99	14.48	1.01	0.48	15.68	3.18	28.49
3500	18.76	21.78	19.57	14.49	1.01	0.50	15.26	3.13	27.99
3600	18.60	21.71	19.02	14.50	1.01	0.51	15.00	3.18	27.89
3700	18.42	21.66	18.52	14.47	1.02	0.53	15.12	3.22	28.21
3800	18.24	21.64	18.13	14.44	1.02	0.55	15.05	3.20	28.00
3900	18.07	21.59	17.78	14.40	1.02	0.56	14.89	3.25	27.95
4000	17.88	21.56	17.41	14.40	1.03	0.58	14.63	3.27	27.69
4100	17.71	21.52	17.00	14.36	1.03	0.59	14.28	3.24	27.67
4200	17.53	21.46	16.61	14.28	1.03	0.61	14.23	3.27	27.71
4300	17.35	21.42	16.29	14.27	1.04	0.62	14.17	3.30	27.50
4400	17.19	21.37	15.91	14.27	1.04	0.64	14.04	3.31	27.54
4500	16.99	21.37	15.59	14.20	1.05	0.65	13.68	3.36	27.45
4600	16.81	21.31	15.25	14.12	1.05	0.67	13.38	3.38	26.93
4700	16.64	21.28	14.91	14.11	1.06	0.68	13.29	3.40	27.06
4800	16.45	21.25	14.61	14.10	1.07	0.70	13.40	3.40	27.36
4900	16.27	21.23	14.30	13.94	1.07	0.71	13.22	3.41	27.21
5000	16.09	21.18	14.06	13.87	1.08	0.72	13.05	3.48	27.02
5100	15.91	21.18	13.74	13.84	1.08	0.74	12.83	3.49	27.22
5200	15.72	21.13	13.39	13.81	1.09	0.75	12.82	3.54	27.02
5300	15.54	21.10	13.09	13.72	1.09	0.76	12.74	3.55	26.77
5400	15.36	21.10	12.86	13.59	1.10	0.78	12.43	3.57	26.68
5500	15.18	21.05	12.60	13.57	1.11	0.79	12.15	3.63	26.46
5600	15.00	21.03	12.27	13.55	1.11	0.80	11.94	3.64	26.23
5700	14.82	21.02	12.03	13.43	1.12	0.81	11.90	3.67	26.20
5800	14.63	20.96	11.80	13.33	1.12	0.82	11.76	3.69	26.29
5900	14.44	20.97	11.55	13.31	1.13	0.84	11.41	3.75	25.96
6000	14.26	20.93	11.27	13.22	1.14	0.85	11.20	3.75	25.44

Typical Performance Data

Note: The following data was taken on the Mini-Circuits Characterization Test Board MB-225-63C+ (Figure 2).

Definitions:
Input Return Loss = S11 (dB)
Gain = S21 (dB)
Isolation = S12 (dB)
Output Return Loss = S22 (dB)

TEST CONDITIONS: I_{DD} = 70mA, V_{DD} = 5V @Temperature = +25degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		1dB Comp. Output	Noise Figure	IP3 - Min
(MHz)	(dB)	(dB)	(dB)	(dB)	K	B1	(dBm)	(dB)	(dBm)
10	24.53	27.85	11.34	6.29	0.87	0.34	18.96	3.28	31.76
20	23.42	25.97	13.50	9.10	0.89	0.43	18.86	3.32	33.88
50	22.09	24.72	17.60	14.77	0.99	0.47	19.07	3.50	34.76
100	21.74	24.52	19.60	18.71	1.02	0.49	19.04	3.53	32.89
200	21.65	24.44	20.49	20.74	1.03	0.49	19.19	3.53	34.79
300	21.62	24.34	20.55	21.25	1.03	0.47	19.14	3.48	34.14
400	21.63	24.34	20.76	21.09	1.03	0.47	19.19	3.48	33.49
500	21.60	24.30	21.21	20.95	1.03	0.47	19.17	3.52	35.17
600	21.60	24.24	21.44	20.62	1.03	0.46	19.24	3.44	34.02
700	21.59	24.19	21.91	20.26	1.03	0.45	19.40	3.44	34.58
800	21.58	24.13	22.37	19.73	1.03	0.44	19.40	3.48	34.24
900	21.56	24.03	23.04	19.30	1.03	0.42	19.47	3.44	34.02
1000	21.54	23.97	23.71	19.00	1.03	0.42	19.37	3.43	34.23
1100	21.52	23.90	24.46	18.57	1.03	0.41	19.37	3.40	34.56
1200	21.50	23.77	25.50	18.23	1.03	0.39	19.57	3.44	33.69
1300	21.45	23.70	26.49	17.81	1.03	0.38	19.55	3.37	33.34
1400	21.41	23.60	27.74	17.54	1.02	0.37	19.55	3.32	33.20
1500	21.37	23.48	29.25	17.19	1.02	0.36	19.57	3.31	33.59
1600	21.31	23.40	31.69	16.98	1.02	0.36	19.45	3.29	33.51
1700	21.24	23.29	33.92	16.76	1.02	0.35	19.14	3.30	32.87
1800	21.17	23.19	38.39	16.48	1.01	0.35	18.95	3.28	32.63
1900	21.09	23.07	42.92	16.17	1.01	0.34	18.54	3.28	31.46
2000	21.00	23.00	43.95	16.09	1.01	0.35	18.57	3.21	32.81
2100	20.90	22.91	42.36	15.93	1.01	0.35	18.31	3.27	32.22
2200	20.79	22.78	36.43	15.75	1.01	0.34	17.76	3.24	31.63
2300	20.66	22.72	32.93	15.65	1.01	0.36	17.72	3.21	31.09
2400	20.54	22.61	30.43	15.55	1.01	0.36	17.54	3.23	29.99
2500	20.42	22.53	28.68	15.41	1.00	0.37	17.37	3.20	30.99
2600	20.28	22.44	27.33	15.29	1.00	0.38	17.10	3.22	30.37
2700	20.14	22.37	26.07	15.21	1.00	0.39	16.99	3.22	30.40
2800	20.00	22.28	24.98	15.19	1.00	0.40	16.87	3.20	30.25
2900	19.85	22.21	23.93	15.18	1.00	0.41	16.75	3.23	29.96
3000	19.69	22.17	23.06	15.12	1.01	0.43	16.59	3.19	29.83
3100	19.53	22.06	22.23	15.07	1.01	0.43	16.62	3.25	29.16
3200	19.37	22.00	21.45	15.07	1.01	0.45	16.67	3.25	29.17
3300	19.21	21.95	20.91	14.99	1.01	0.46	16.20	3.27	29.47
3400	19.04	21.89	20.38	14.92	1.01	0.48	16.25	3.25	29.10
3500	18.86	21.84	19.92	14.94	1.01	0.50	16.04	3.32	28.85
3600	18.70	21.79	19.33	14.96	1.02	0.51	15.83	3.29	28.38
3700	18.51	21.76	18.78	14.93	1.02	0.53	15.79	3.33	28.91
3800	18.34	21.70	18.36	14.89	1.02	0.54	15.61	3.33	28.68
3900	18.16	21.65	17.99	14.88	1.03	0.56	15.46	3.36	28.43
4000	17.98	21.61	17.61	14.88	1.03	0.58	15.25	3.36	28.30
4100	17.81	21.57	17.15	14.84	1.04	0.59	14.82	3.36	28.06
4200	17.63	21.53	16.75	14.78	1.04	0.61	14.87	3.41	27.87
4300	17.45	21.49	16.40	14.77	1.04	0.62	14.68	3.41	27.65
4400	17.28	21.43	16.01	14.76	1.05	0.63	14.51	3.43	27.79
4500	17.08	21.41	15.67	14.72	1.05	0.65	14.27	3.48	27.53
4600	16.91	21.37	15.32	14.62	1.06	0.67	13.67	3.48	27.40
4700	16.73	21.34	14.96	14.62	1.06	0.68	13.47	3.53	27.47
4800	16.55	21.33	14.65	14.62	1.07	0.70	13.34	3.53	27.42
4900	16.36	21.29	14.34	14.46	1.08	0.71	13.21	3.59	27.63
5000	16.18	21.26	14.09	14.39	1.08	0.72	12.95	3.61	27.57
5100	16.00	21.23	13.75	14.36	1.09	0.74	12.62	3.61	27.67
5200	15.82	21.20	13.40	14.32	1.09	0.75	12.62	3.66	27.57
5300	15.63	21.16	13.11	14.24	1.10	0.76	12.59	3.67	27.11
5400	15.45	21.17	12.86	14.11	1.11	0.78	12.15	3.71	27.04
5500	15.27	21.09	12.59	14.10	1.11	0.79	12.09	3.76	26.97
5600	15.09	21.12	12.27	14.06	1.12	0.80	11.98	3.78	26.71
5700	14.91	21.06	12.02	13.96	1.12	0.81	12.03	3.79	26.59
5800	14.72	21.05	11.79	13.84	1.13	0.83	12.10	3.84	26.52
5900	14.53	21.02	11.53	13.81	1.14	0.84	11.74	3.90	26.45
6000	14.35	21.02	11.25	13.72	1.14	0.85	11.79	3.93	26.08

Typical Performance Data

Note: The following data was taken on the Mini-Circuits Characterization Test Board MB-225-63C+ (Figure 2).

Definitions:
Input Return Loss = S11 (dB)
Gain = S21 (dB)
Isolation = S12 (dB)
Output Return Loss = S22 (dB)

TEST CONDITIONS: I_{DD} = 79.4mA, V_{DD} = 5.25V @Temperature = +25degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		1dB Comp. Output	Noise Figure	IP3 - Min
(MHz)	(dB)	(dB)	(dB)	(dB)	K	B1	(dBm)	(dB)	(dBm)
10	24.63	27.81	11.51	6.34	0.86	0.34	19.76	3.54	31.02
20	23.51	25.99	13.60	9.18	0.89	0.42	19.75	3.54	36.52
50	22.18	24.78	17.32	15.00	0.99	0.47	20.17	3.60	34.54
100	21.82	24.61	19.02	19.15	1.02	0.49	20.06	3.62	34.91
200	21.73	24.51	19.77	21.31	1.03	0.49	20.13	3.58	35.28
300	21.70	24.44	19.81	21.95	1.03	0.48	20.12	3.58	36.28
400	21.71	24.41	19.98	21.77	1.03	0.47	20.18	3.56	35.38
500	21.68	24.36	20.40	21.55	1.03	0.47	20.20	3.56	34.48
600	21.68	24.34	20.64	21.21	1.03	0.46	20.25	3.50	36.19
700	21.66	24.27	21.07	20.78	1.03	0.45	20.32	3.51	35.68
800	21.65	24.20	21.49	20.25	1.03	0.44	20.32	3.53	36.38
900	21.64	24.10	22.11	19.78	1.03	0.43	20.37	3.54	36.50
1000	21.61	24.03	22.74	19.46	1.03	0.42	20.33	3.51	35.99
1100	21.60	23.96	23.47	19.01	1.03	0.41	20.33	3.49	35.48
1200	21.57	23.85	24.36	18.65	1.03	0.39	20.39	3.47	35.66
1300	21.53	23.76	25.21	18.20	1.03	0.38	20.32	3.45	35.15
1400	21.49	23.68	26.34	17.93	1.02	0.37	20.29	3.41	33.99
1500	21.44	23.57	27.64	17.58	1.02	0.36	20.24	3.40	33.70
1600	21.39	23.45	29.67	17.36	1.02	0.35	20.12	3.38	34.10
1700	21.32	23.35	31.50	17.12	1.02	0.35	19.85	3.39	33.25
1800	21.25	23.27	34.70	16.85	1.02	0.35	19.61	3.35	34.01
1900	21.17	23.14	38.96	16.51	1.01	0.34	19.15	3.33	32.89
2000	21.07	23.06	43.77	16.45	1.01	0.34	19.12	3.31	32.84
2100	20.98	22.96	46.05	16.28	1.01	0.34	18.82	3.32	31.79
2200	20.87	22.84	40.63	16.09	1.01	0.34	18.25	3.30	32.00
2300	20.75	22.75	35.41	16.00	1.01	0.35	18.18	3.32	32.68
2400	20.62	22.67	32.00	15.92	1.01	0.36	18.00	3.33	31.29
2500	20.50	22.60	29.81	15.77	1.01	0.37	17.80	3.27	31.05
2600	20.37	22.49	28.28	15.66	1.01	0.37	17.50	3.31	30.79
2700	20.23	22.44	26.79	15.59	1.01	0.39	17.39	3.32	31.04
2800	20.08	22.34	25.57	15.57	1.01	0.39	17.25	3.27	30.72
2900	19.93	22.27	24.44	15.58	1.01	0.41	17.12	3.31	29.92
3000	19.77	22.21	23.47	15.52	1.01	0.42	16.92	3.30	29.83
3100	19.62	22.13	22.56	15.48	1.01	0.43	16.97	3.32	29.46
3200	19.46	22.07	21.75	15.49	1.01	0.45	17.01	3.34	30.03
3300	19.29	22.02	21.16	15.43	1.01	0.46	16.54	3.37	29.45
3400	19.12	21.95	20.60	15.35	1.01	0.48	16.59	3.36	29.73
3500	18.94	21.89	20.11	15.39	1.02	0.49	16.35	3.37	29.03
3600	18.78	21.85	19.49	15.40	1.02	0.51	16.14	3.38	29.06
3700	18.60	21.81	18.91	15.39	1.02	0.53	16.12	3.43	29.28
3800	18.43	21.76	18.47	15.36	1.03	0.54	15.94	3.44	28.89
3900	18.25	21.72	18.08	15.33	1.03	0.56	15.80	3.46	28.83
4000	18.07	21.65	17.69	15.36	1.03	0.57	15.57	3.46	28.46
4100	17.89	21.61	17.22	15.33	1.04	0.59	15.16	3.47	28.29
4200	17.71	21.58	16.79	15.28	1.04	0.60	15.19	3.49	28.64
4300	17.54	21.55	16.42	15.26	1.05	0.62	15.00	3.51	27.89
4400	17.36	21.50	16.03	15.26	1.05	0.63	14.83	3.53	28.22
4500	17.17	21.47	15.68	15.22	1.06	0.65	14.58	3.61	27.97
4600	16.99	21.45	15.31	15.15	1.06	0.67	14.00	3.62	27.97
4700	16.82	21.41	14.94	15.14	1.07	0.68	13.78	3.65	27.79
4800	16.64	21.39	14.63	15.14	1.08	0.70	13.66	3.66	28.13
4900	16.45	21.33	14.32	14.98	1.08	0.71	13.52	3.67	27.77
5000	16.27	21.32	14.06	14.93	1.09	0.72	13.26	3.75	27.55
5100	16.08	21.28	13.71	14.89	1.09	0.74	12.92	3.72	27.88
5200	15.90	21.27	13.37	14.86	1.10	0.75	12.93	3.79	27.80
5300	15.71	21.24	13.07	14.78	1.10	0.76	12.90	3.86	27.65
5400	15.53	21.24	12.82	14.64	1.11	0.78	12.44	3.84	27.52
5500	15.36	21.18	12.55	14.61	1.12	0.79	12.39	3.88	27.25
5600	15.18	21.14	12.22	14.58	1.12	0.80	12.26	3.92	27.16
5700	14.99	21.11	11.97	14.49	1.13	0.82	12.32	3.97	26.85
5800	14.80	21.09	11.75	14.36	1.13	0.83	12.43	3.98	26.94
5900	14.61	21.12	11.48	14.32	1.14	0.84	12.03	4.03	26.84
6000	14.44	21.05	11.21	14.22	1.15	0.85	12.12	4.07	26.63

Typical Performance Data

Note: The following data was taken on the Mini-Circuits Characterization Test Board MB-225-63C+ (Figure 2).

Definitions:
Input Return Loss = S11 (dB)
Gain = S21 (dB)
Isolation = S12 (dB)
Output Return Loss = S22 (dB)

TEST CONDITIONS: I_{DD} = 65.5mA, V_{DD} = 5V @Temperature = -55degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		1dB Comp. Output	Noise Figure	IP3 - Min
(MHz)	(dB)	(dB)	(dB)	(dB)	K	B1	(dBm)	(dB)	(dBm)
10	24.76	28.25	11.64	6.50	0.88	0.38	19.06	2.52	30.79
20	23.63	26.16	13.64	9.30	0.89	0.43	18.81	2.56	33.57
50	22.29	24.92	17.14	15.05	0.99	0.48	18.56	2.74	32.28
100	21.95	24.75	18.67	19.05	1.02	0.49	18.80	2.77	34.67
200	21.86	24.65	19.51	21.02	1.03	0.49	18.69	2.75	33.95
300	21.83	24.59	19.48	21.60	1.03	0.48	18.84	2.73	33.23
400	21.84	24.57	19.49	21.42	1.03	0.48	18.83	2.70	35.93
500	21.81	24.49	19.83	21.13	1.03	0.47	18.98	2.70	33.88
600	21.81	24.44	19.86	20.57	1.03	0.46	19.00	2.67	34.81
700	21.80	24.38	20.02	20.03	1.03	0.45	18.92	2.66	34.86
800	21.79	24.35	20.34	19.31	1.03	0.44	18.92	2.68	35.22
900	21.77	24.25	20.80	18.68	1.03	0.43	18.93	2.69	34.76
1000	21.75	24.21	21.19	18.26	1.03	0.42	19.01	2.68	35.49
1100	21.74	24.11	21.72	17.74	1.03	0.40	19.17	2.64	34.80
1200	21.71	24.01	22.34	17.26	1.02	0.39	18.98	2.61	33.51
1300	21.67	23.94	22.78	16.76	1.02	0.38	19.04	2.60	34.54
1400	21.63	23.83	23.34	16.39	1.02	0.37	19.43	2.54	34.80
1500	21.59	23.76	24.09	15.99	1.02	0.36	19.19	2.56	33.35
1600	21.54	23.64	25.08	15.74	1.02	0.35	19.24	2.55	34.01
1700	21.48	23.57	25.79	15.49	1.01	0.35	18.84	2.55	34.06
1800	21.41	23.45	26.60	15.12	1.01	0.34	19.28	2.52	33.24
1900	21.35	23.35	27.62	14.75	1.01	0.33	19.26	2.51	33.37
2000	21.25	23.26	28.76	14.64	1.01	0.33	19.28	2.50	33.37
2100	21.18	23.13	29.76	14.44	1.01	0.32	18.98	2.50	32.21
2200	21.08	23.06	30.18	14.21	1.00	0.33	18.95	2.46	32.29
2300	20.96	22.99	31.11	14.05	1.00	0.33	18.85	2.45	32.66
2400	20.86	22.88	31.28	13.94	1.00	0.33	18.53	2.44	32.08
2500	20.74	22.81	30.75	13.75	1.00	0.34	18.26	2.40	32.22
2600	20.62	22.73	30.62	13.56	1.00	0.34	17.98	2.43	32.00
2700	20.49	22.63	29.70	13.42	1.00	0.35	18.08	2.43	31.34
2800	20.37	22.56	28.41	13.39	1.00	0.36	17.79	2.40	31.12
2900	20.23	22.46	27.28	13.30	1.00	0.36	17.73	2.42	31.10
3000	20.09	22.41	26.20	13.18	1.00	0.37	17.26	2.39	30.08
3100	19.95	22.32	25.30	13.11	1.00	0.38	16.91	2.42	30.70
3200	19.80	22.24	24.37	13.04	1.00	0.39	17.13	2.45	30.76
3300	19.65	22.19	23.72	12.88	1.00	0.40	17.09	2.44	30.35
3400	19.49	22.14	23.12	12.74	1.00	0.42	16.94	2.45	30.16
3500	19.33	22.06	22.58	12.74	1.00	0.43	16.49	2.44	30.01
3600	19.18	21.99	21.75	12.73	1.00	0.44	16.22	2.46	29.38
3700	19.02	21.97	20.96	12.67	1.01	0.46	16.33	2.48	30.19
3800	18.86	21.92	20.47	12.61	1.01	0.47	16.27	2.48	29.38
3900	18.70	21.86	20.07	12.59	1.01	0.48	16.12	2.51	29.69
4000	18.53	21.80	19.63	12.59	1.01	0.50	15.91	2.52	29.19
4100	18.38	21.74	19.14	12.52	1.02	0.51	15.55	2.50	28.92
4200	18.21	21.70	18.71	12.43	1.02	0.52	15.52	2.50	29.35
4300	18.04	21.65	18.29	12.45	1.02	0.54	15.50	2.52	28.88
4400	17.89	21.61	17.81	12.45	1.02	0.55	15.39	2.54	28.57
4500	17.72	21.55	17.45	12.39	1.03	0.56	14.98	2.58	28.54
4600	17.56	21.51	17.07	12.31	1.03	0.58	14.69	2.57	28.28
4700	17.40	21.47	16.70	12.33	1.03	0.59	14.61	2.58	28.08
4800	17.23	21.42	16.35	12.32	1.04	0.60	14.71	2.56	28.26
4900	17.07	21.39	16.00	12.15	1.04	0.61	14.60	2.63	28.43
5000	16.91	21.35	15.75	12.11	1.04	0.62	14.41	2.67	28.34
5100	16.74	21.31	15.36	12.11	1.05	0.64	14.19	2.65	28.61
5200	16.57	21.26	14.95	12.10	1.05	0.65	14.18	2.67	28.24
5300	16.41	21.23	14.61	12.03	1.05	0.66	14.11	2.68	28.25
5400	16.25	21.20	14.36	11.95	1.06	0.68	13.82	2.73	28.09
5500	16.08	21.16	14.06	11.99	1.06	0.69	13.53	2.74	27.65
5600	15.93	21.13	13.68	12.00	1.07	0.70	13.33	2.76	27.55
5700	15.77	21.10	13.40	11.93	1.07	0.71	13.30	2.75	27.60
5800	15.59	21.05	13.17	11.86	1.07	0.72	13.12	2.80	27.50
5900	15.42	21.02	12.86	11.88	1.08	0.74	12.76	2.84	27.39
6000	15.26	20.99	12.56	11.83	1.08	0.75	12.58	2.83	26.95

Typical Performance Data

Note: The following data was taken on the Mini-Circuits Characterization Test Board MB-225-63C+ (Figure 2).

Definitions:
Input Return Loss = S11 (dB)
Gain = S21 (dB)
Isolation = S12 (dB)
Output Return Loss = S22 (dB)

TEST CONDITIONS: I_{DD} = 73.7mA, V_{DD} = 5V @Temperature = +105degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		1dB Comp. Output	Noise Figure	IP3 - Min
(MHz)	(dB)	(dB)	(dB)	(dB)	K	B1	(dBm)	(dB)	(dBm)
10	24.22	27.76	11.00	6.10	0.87	0.34	19.32	4.20	34.10
20	23.14	25.67	13.36	8.80	0.89	0.41	19.11	4.19	34.86
50	21.82	24.57	18.17	14.50	0.99	0.48	19.19	4.27	35.19
100	21.48	24.29	20.80	18.20	1.03	0.49	19.31	4.36	35.52
200	21.38	24.23	21.95	20.20	1.04	0.49	19.36	4.35	35.82
300	21.35	24.16	22.39	20.50	1.04	0.48	19.40	4.33	34.61
400	21.36	24.11	22.85	20.50	1.04	0.47	19.40	4.30	33.39
500	21.33	24.04	23.56	20.50	1.04	0.46	19.47	4.33	34.95
600	21.33	23.97	24.03	20.40	1.04	0.45	19.44	4.25	35.55
700	21.31	23.92	24.82	20.20	1.04	0.45	19.48	4.24	36.08
800	21.30	23.85	25.59	20.00	1.04	0.44	19.45	4.30	36.60
900	21.28	23.77	26.65	19.90	1.03	0.43	19.46	4.32	35.13
1000	21.25	23.68	27.65	19.70	1.03	0.42	19.49	4.27	34.53
1100	21.23	23.59	28.57	19.60	1.03	0.41	19.55	4.23	34.23
1200	21.20	23.50	29.86	19.50	1.03	0.40	19.43	4.22	33.58
1300	21.14	23.38	30.26	19.30	1.03	0.39	19.35	4.19	33.02
1400	21.09	23.27	30.54	19.30	1.03	0.38	19.39	4.13	34.50
1500	21.03	23.18	30.12	19.10	1.02	0.38	19.12	4.15	33.10
1600	20.96	23.06	29.27	19.00	1.02	0.37	19.03	4.12	31.94
1700	20.87	22.97	28.20	18.90	1.02	0.37	18.53	4.12	32.00
1800	20.78	22.86	27.26	18.80	1.02	0.37	18.56	4.12	31.85
1900	20.68	22.73	26.17	18.60	1.02	0.37	18.38	4.09	30.43
2000	20.56	22.65	25.07	18.70	1.01	0.38	18.19	4.10	30.76
2100	20.44	22.54	23.99	18.60	1.01	0.38	17.83	4.09	31.54
2200	20.31	22.45	23.11	18.50	1.01	0.39	17.67	4.09	30.87
2300	20.16	22.37	22.22	18.50	1.01	0.40	17.46	4.10	30.46
2400	20.01	22.30	21.40	18.50	1.01	0.42	16.95	4.11	30.23
2500	19.85	22.20	20.71	18.50	1.01	0.43	16.63	4.09	29.26
2600	19.69	22.10	20.01	18.50	1.01	0.44	16.24	4.11	29.15
2700	19.52	22.05	19.37	18.60	1.01	0.46	16.31	4.10	29.21
2800	19.34	21.99	18.87	18.60	1.02	0.47	15.97	4.12	28.82
2900	19.16	21.92	18.33	18.70	1.02	0.49	15.85	4.16	28.70
3000	18.97	21.86	17.84	18.80	1.02	0.51	15.32	4.14	28.19
3100	18.78	21.79	17.37	18.80	1.02	0.53	14.90	4.18	27.88
3200	18.59	21.75	16.94	18.90	1.03	0.55	15.05	4.20	27.99
3300	18.39	21.71	16.58	19.00	1.03	0.57	14.92	4.25	27.87
3400	18.19	21.68	16.23	19.00	1.04	0.59	14.77	4.27	27.53
3500	17.98	21.61	15.93	19.10	1.04	0.60	14.34	4.29	27.12
3600	17.78	21.60	15.61	19.10	1.05	0.62	14.06	4.28	27.24
3700	17.57	21.56	15.36	19.20	1.06	0.64	14.19	4.35	27.27
3800	17.37	21.53	15.10	19.20	1.06	0.66	14.07	4.38	27.28
3900	17.16	21.51	14.90	19.20	1.07	0.68	13.85	4.39	27.01
4000	16.94	21.49	14.68	19.30	1.08	0.69	13.57	4.48	26.48
4100	16.74	21.45	14.40	19.30	1.09	0.71	13.25	4.45	26.25
4200	16.52	21.43	14.14	19.20	1.10	0.73	13.20	4.50	26.23
4300	16.31	21.40	13.96	19.20	1.11	0.74	13.13	4.53	26.01
4400	16.11	21.36	13.75	19.10	1.12	0.76	13.01	4.58	26.34
4500	15.89	21.34	13.50	19.00	1.13	0.77	12.61	4.63	25.63
4600	15.67	21.36	13.24	18.90	1.14	0.79	12.29	4.66	25.43
4700	15.47	21.32	12.98	18.80	1.15	0.80	12.24	4.71	25.56
4800	15.25	21.30	12.77	18.70	1.16	0.82	12.35	4.73	25.70
4900	15.04	21.29	12.51	18.40	1.17	0.83	12.16	4.79	25.34
5000	14.82	21.29	12.28	18.30	1.19	0.84	11.99	4.86	25.00
5100	14.61	21.27	12.02	18.10	1.20	0.86	11.77	4.86	25.16
5200	14.39	21.27	11.75	17.90	1.21	0.87	11.74	4.96	25.12
5300	14.19	21.26	11.50	17.80	1.22	0.89	11.66	5.06	24.92
5400	13.97	21.28	11.25	17.50	1.24	0.90	11.37	5.07	24.53
5500	13.76	21.24	11.02	17.30	1.24	0.91	11.11	5.09	24.15
5600	13.56	21.22	10.74	17.20	1.25	0.92	10.88	5.13	23.98
5700	13.35	21.21	10.53	16.90	1.27	0.93	10.85	5.18	23.96
5800	13.13	21.22	10.31	16.70	1.28	0.95	10.70	5.26	23.78
5900	12.92	21.18	10.08	16.50	1.29	0.96	10.40	5.26	23.35
6000	12.71	21.18	9.84	16.30	1.30	0.97	10.21	5.31	22.92

Typical Performance Data

Note: The following data was taken on the Mini-Circuits Evaluation Board TB-LEE1-63C+ (Figure 3).

Definitions:
Input Return Loss = S11 (dB)
Gain = S21 (dB)
Isolation = S12 (dB)
Output Return Loss = S22 (dB)

TEST CONDITIONS: I_{CC} = 70mA, V_{CC} = 5V @Temperature = +25degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		1dB Comp. Output	Noise Figure	IP3 - Min
(MHz)	(dB)	(dB)	(dB)	(dB)	K	B1	(dBm)	(dB)	(dBm)
10	24.69	27.73	9.44	9.17	0.89	0.51	18.19	3.37	30.40
50	22.00	24.80	16.81	15.64	1.00	0.50	18.94	3.48	34.85
100	21.68	24.52	19.29	19.09	1.03	0.50	18.92	3.57	33.58
200	21.54	24.43	20.22	20.65	1.04	0.50	18.83	3.53	34.48
300	21.49	24.53	20.14	20.33	1.04	0.51	18.82	3.54	33.80
400	21.46	24.43	20.10	19.65	1.04	0.50	18.75	3.52	34.59
500	21.41	24.44	19.89	19.00	1.05	0.50	18.98	3.55	33.99
600	21.38	24.44	19.95	18.17	1.05	0.50	18.99	3.52	32.85
700	21.35	24.37	19.43	17.43	1.05	0.48	18.90	3.45	34.40
800	21.30	24.32	19.21	16.65	1.05	0.48	18.95	3.49	33.69
900	21.27	24.26	19.16	15.94	1.05	0.47	18.86	3.52	33.17
1000	21.26	24.21	19.06	15.45	1.04	0.46	19.09	3.52	34.01
1250	21.13	24.00	19.20	14.37	1.04	0.43	18.91	3.50	33.38
1500	21.01	23.76	19.70	13.74	1.04	0.41	18.57	3.42	31.91
1750	20.82	23.52	20.92	13.37	1.03	0.40	18.71	3.38	31.36
2000	20.61	23.28	22.77	13.55	1.03	0.40	18.06	3.36	30.73
2250	20.36	23.01	24.28	13.95	1.02	0.41	17.51	3.35	29.84
2500	20.06	22.79	24.58	14.76	1.02	0.44	17.09	3.35	28.99
2750	19.76	22.55	21.28	16.15	1.02	0.47	16.69	3.40	28.68
3000	19.40	22.34	18.17	17.90	1.03	0.51	16.05	3.37	28.31
3250	18.98	22.19	15.67	20.13	1.03	0.55	15.99	3.45	28.52
3500	18.54	22.06	13.72	22.99	1.04	0.60	15.27	3.50	27.25
3750	18.09	21.99	12.25	25.46	1.05	0.65	15.00	3.53	26.98
4000	17.60	21.92	11.06	26.14	1.07	0.70	14.71	3.60	26.87
4250	17.11	21.89	10.14	24.52	1.08	0.74	14.22	3.66	26.43
4500	16.63	21.84	9.41	22.94	1.10	0.78	14.09	3.71	26.37
4750	16.14	21.76	8.91	21.51	1.12	0.81	13.74	3.78	26.28
5000	15.68	21.75	8.46	20.36	1.14	0.85	13.42	3.86	26.00
5250	15.23	21.68	8.16	19.63	1.16	0.88	13.69	3.97	26.13
5500	14.78	21.61	7.94	18.99	1.18	0.90	13.22	4.06	25.68
5750	14.33	21.56	7.81	18.38	1.20	0.92	12.53	4.11	25.05
6000	13.86	21.52	7.70	17.82	1.23	0.95	12.89	4.22	25.15

Typical Performance Data

Note: The following data was taken on the Mini-Circuits Evaluation Board TB-LEE1-63C+ (Figure 3).

Definitions:
Input Return Loss = S11 (dB)
Gain = S21 (dB)
Isolation = S12 (dB)
Output Return Loss = S22 (dB)

TEST CONDITIONS: I_{CC} = 65.5mA, V_{CC} = 5V @Temperature = -55degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		1dB Comp. Output	Noise Figure	IP3 - Min
(MHz)	(dB)	(dB)	(dB)	(dB)	K	B1	(dBm)	(dB)	(dBm)
10	24.94	28.02	9.34	9.46	0.89	0.53	18.09	2.70	30.66
50	22.24	24.96	16.32	16.00	0.99	0.50	18.54	2.73	34.58
100	21.89	24.77	18.35	19.49	1.03	0.50	18.57	2.76	33.49
200	21.78	24.66	19.18	21.00	1.04	0.50	18.42	2.74	33.82
300	21.73	24.61	19.08	20.61	1.04	0.49	18.44	2.73	34.73
400	21.71	24.59	18.98	19.76	1.04	0.49	18.38	2.74	33.75
500	21.65	24.59	18.74	19.08	1.04	0.49	18.63	2.79	34.39
600	21.63	24.62	18.77	18.14	1.04	0.49	18.68	2.73	34.50
700	21.62	24.57	18.36	17.15	1.04	0.48	18.52	2.67	33.17
800	21.55	24.52	18.21	16.35	1.04	0.47	18.59	2.74	33.68
900	21.53	24.47	18.21	15.49	1.04	0.46	18.45	2.71	33.55
1000	21.51	24.44	18.12	14.93	1.04	0.45	18.78	2.72	33.63
1250	21.40	24.21	18.40	13.75	1.04	0.42	18.58	2.72	33.32
1500	21.29	24.01	19.01	13.01	1.03	0.39	18.34	2.57	32.77
1750	21.12	23.74	20.40	12.47	1.02	0.37	18.75	2.58	32.30
2000	20.93	23.51	22.79	12.49	1.02	0.37	18.32	2.58	31.28
2250	20.71	23.22	25.74	12.70	1.02	0.37	17.89	2.61	31.09
2500	20.45	23.01	31.25	13.19	1.01	0.39	17.71	2.62	30.58
2750	20.22	22.74	29.99	14.19	1.01	0.41	17.43	2.57	29.86
3000	19.90	22.50	23.42	15.39	1.01	0.44	16.85	2.58	29.13
3250	19.56	22.30	19.34	17.07	1.01	0.48	16.88	2.58	29.22
3500	19.18	22.14	16.35	19.66	1.02	0.53	16.13	2.61	28.37
3750	18.79	22.02	14.32	22.95	1.03	0.58	15.92	2.63	27.81
4000	18.36	21.89	12.67	28.74	1.03	0.62	15.65	2.69	27.50
4250	17.94	21.80	11.41	41.85	1.04	0.66	15.23	2.72	27.50
4500	17.51	21.71	10.49	32.45	1.05	0.70	15.08	2.77	27.37
4750	17.08	21.64	9.87	25.63	1.07	0.73	14.81	2.78	27.39
5000	16.66	21.57	9.25	22.09	1.08	0.76	14.47	2.80	27.14
5250	16.25	21.49	8.91	20.21	1.09	0.79	14.77	2.80	27.23
5500	15.84	21.45	8.63	18.47	1.11	0.81	14.27	2.97	26.76
5750	15.42	21.34	8.45	17.19	1.12	0.83	13.60	3.00	26.70
6000	14.98	21.31	8.28	16.17	1.14	0.85	14.00	3.03	26.43

Typical Performance Data

Note: The following data was taken on the Mini-Circuits Evaluation Board TB-LEE1-63C+ (Figure 3).

Definitions:
Input Return Loss = S11 (dB)
Gain = S21 (dB)
Isolation = S12 (dB)
Output Return Loss = S22 (dB)

TEST CONDITIONS: I_{CC} = 73.7mA, V_{CC} = 5V @Temperature = +105degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		1dB Comp. Output	Noise Figure	IP3 - Min
(MHz)	(dB)	(dB)	(dB)	(dB)	K	B1	(dBm)	(dB)	(dBm)
10	24.26	27.82	9.38	9.00	0.90	0.55	18.21	4.11	30.28
50	21.74	24.61	17.35	15.21	1.00	0.50	19.09	4.26	31.29
100	21.40	24.31	20.60	18.46	1.03	0.50	19.05	4.39	33.85
200	21.25	24.31	21.91	20.06	1.04	0.51	19.00	4.36	34.23
300	21.20	24.22	21.90	19.77	1.04	0.50	18.96	4.36	33.52
400	21.16	24.21	21.79	19.33	1.05	0.50	18.93	4.37	34.64
500	21.12	24.21	21.49	18.84	1.05	0.50	19.10	4.41	33.27
600	21.09	24.17	21.41	18.13	1.05	0.50	19.08	4.35	32.85
700	21.05	24.13	20.75	17.59	1.05	0.49	19.02	4.32	33.20
800	21.01	24.09	20.43	16.92	1.05	0.48	19.08	4.33	34.22
900	20.98	24.00	20.19	16.38	1.05	0.47	19.01	4.37	33.50
1000	20.95	23.93	19.95	16.02	1.05	0.46	19.16	4.37	33.32
1250	20.81	23.73	19.70	15.23	1.05	0.44	18.92	4.30	32.71
1500	20.67	23.47	19.70	14.87	1.04	0.43	18.44	4.26	31.12
1750	20.45	23.14	20.15	14.76	1.03	0.42	18.23	4.22	30.38
2000	20.18	22.93	20.45	15.27	1.03	0.44	17.30	4.22	29.60
2250	19.86	22.70	19.72	16.04	1.03	0.46	16.56	4.22	28.28
2500	19.48	22.49	18.45	17.38	1.04	0.50	15.95	4.23	27.80
2750	19.09	22.28	16.22	19.15	1.04	0.54	15.43	4.30	27.17
3000	18.60	22.13	14.24	20.74	1.05	0.59	14.69	4.33	26.10
3250	18.07	22.07	12.65	21.31	1.06	0.64	14.58	4.38	26.04
3500	17.51	22.01	11.42	20.89	1.08	0.69	13.82	4.40	25.30
3750	16.95	22.01	10.43	19.83	1.11	0.74	13.51	4.55	24.68
4000	16.37	22.00	9.61	18.75	1.13	0.79	13.20	4.73	24.17
4250	15.79	22.04	8.94	17.89	1.16	0.84	12.61	4.81	23.62
4500	15.21	22.01	8.37	17.38	1.19	0.88	12.47	4.94	23.43
4750	14.66	21.99	7.92	17.02	1.22	0.91	12.10	5.02	23.32
5000	14.13	21.97	7.53	16.96	1.25	0.94	11.81	5.12	22.75
5250	13.64	21.92	7.24	17.13	1.28	0.97	12.03	5.20	22.98
5500	13.16	21.86	7.07	17.64	1.32	1.00	11.62	5.40	22.31
5750	12.69	21.75	6.99	18.31	1.35	1.02	10.99	5.48	21.57
6000	12.22	21.75	6.96	19.04	1.40	1.04	11.31	5.62	21.48