MMIC Amplifier MERA-7456+

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions or to view GRAPHS.

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

TEST CONDITIONS: Icc = 80mA, Vd=4.82V @Temperature = +25degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		FREQ	IP3 Output	1dB Comp. Output	Noise Figure
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Delta	(MHz)	(dBm)	(dBm)	(dB)
20	25.07	28.64	25.86	16.71	1.08	0.67	20	36.82	19.75	2.57
30	25.10	27.60	27.14	17.13	1.03	0.76	30	36.52	19.90	2.60
50	25.06	28.06	26.31	16.94	1.05	0.71	50	36.30	20.03	2.59
100	24.97	28.06	25.37	16.48	1.05	0.71	100	36.29	19.99	2.76
150	24.89	28.13	24.45	15.97	1.06	0.70	200	36.09	19.91	2.62
200	24.80	28.10	23.42	15.23	1.05	0.69	300	35.71	19.50	2.89
250	24.68	27.84	22.38	14.58	1.05	0.70	400	35.38	19.83	2.72
300	24.57	27.94	21.48	13.94	1.05	0.69	500	35.00	19.18	2.84
350	24.46	27.91	20.90	13.44	1.05	0.68	600	34.64	19.53	2.75
400	24.36	27.77	20.29	12.88	1.04	0.68	700	34.17	19.16	2.92
450	24.24	27.78	19.68	12.35	1.04	0.67	800	33.66	18.72	2.76
500	24.12	27.71	18.98	11.79	1.04	0.67	900	33.12	18.76	2.81
600	23.84	27.72	17.93	10.95	1.04	0.65	1000	32.38	17.98	2.72
700	23.57	27.57	17.11	10.07	1.03	0.65	1100	31.82	18.16	2.79
800	23.28	27.45	16.15	9.31	1.02	0.64	1200	31.39	17.60	2.80
900	22.97	27.35	15.52	8.63	1.02	0.63	1300	30.88	17.38	2.81
1000	22.62	27.25	14.79	8.03	1.02	0.62	1400	30.41	17.16	2.90
1100	22.28	27.21	14.14	7.49	1.01	0.61	1500	30.07	16.19	2.95
1200	21.94	27.00	13.63	7.00	1.00	0.60	1600	30.07	16.21	2.93
1300	21.55	26.93	13.10	6.60	1.01	0.59	1700	29.77	15.16	2.80
1400	21.19	26.91	12.54	6.18	1.01	0.58	1800	29.26	15.28	2.97
1500	20.81	26.77	12.12	5.84	1.00	0.57	1900	28.63	14.93	2.88
1600	20.41	26.73	11.78	5.60	1.01	0.56	2000	27.97	13.71	2.95
1700	20.05	26.61	11.36	5.31	1.01	0.56	2100	27.35	14.23	2.78
1800	19.68	26.53	10.99	5.07	1.01	0.55	2200	26.95	13.14	2.99
2000	18.90	26.32	10.30	4.64	1.01	0.54	2300	26.91	13.16	2.81
2200	18.13	26.24	9.65	4.30	1.02	0.53	2400	26.98	13.00	2.93
2400	17.36	26.10	9.16	4.06	1.04	0.52	2500	26.80	12.15	2.86
2600	16.60	26.06	8.57	3.84	1.06	0.52	2600	26.28	12.49	3.09
2800	15.85	25.96	8.10	3.69	1.09	0.51	2700	25.66	11.28	2.92
3000	15.07	25.86	7.46	3.48	1.11	0.52	2800	25.04	11.81	3.14
3200	14.29	25.80	6.88	3.35	1.14	0.52	2900	24.95	11.65	3.02
3400	13.55	25.77	6.32	3.17	1.15	0.53	3000	25.07	10.37	3.03
3600	12.74	25.98	5.80	3.04	1.20	0.53	3100	25.13	11.09	3.05
4000	11.02	26.25	4.81	2.79	1.28	0.55	3200	24.83	9.81	3.07
4500	8.89	26.80	3.82	2.50	1.38	0.57	3300	24.44	10.46	3.15
5000	6.68	27.45	3.10	2.24	1.50	0.60	3400	24.03	9.92	3.45
5500	4.35	28.36	2.61	1.99	1.70	0.63	3600	23.68	9.84	3.44
6000	2.04	29.17	2.26	1.77	1.90	0.65	3800	23.56	9.35	3.55
7000	-2.47	30.89	1.87	1.46	2.68	0.69	4000	23.02	8.13	3.56

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: Icc = 64mA, Vd=4.77V @Temperature = +25degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		FREQ	IP3 Output	1dB Comp. Output	Noise Figure
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Delta	(MHz)	(dBm)	(dBm)	(dB)
20	24.83	28.25	32.36	18.35	1.07	0.68	20	33.65	18.74	2.56
30	24.86	27.73	34.99	19.10	1.05	0.72	30	33.41	18.66	2.56
50	24.81	27.67	32.21	18.83	1.05	0.72	50	33.25	18.70	2.54
100	24.73	27.90	29.76	18.24	1.06	0.70	100	33.29	18.66	2.68
150	24.65	27.58	27.82	17.42	1.05	0.72	200	33.30	18.74	2.59
200	24.57	27.71	25.87	16.58	1.05	0.70	300	33.16	18.40	2.83
250	24.45	27.82	24.53	15.71	1.06	0.68	400	33.09	18.53	2.70
300	24.35	27.76	23.20	15.00	1.05	0.68	500	32.92	18.20	2.77
350	24.24	27.65	22.47	14.39	1.05	0.68	600	32.77	18.25	2.70
400	24.14	27.50	21.83	13.71	1.04	0.68	700	32.49	18.12	2.82
450	24.03	27.45	20.99	13.13	1.04	0.68	800	32.25	17.79	2.73
500	23.91	27.49	20.17	12.48	1.04	0.67	900	31.98	17.99	2.74
600	23.65	27.33	18.95	11.55	1.03	0.66	1000	31.50	17.46	2.68
700	23.39	27.31	17.94	10.57	1.03	0.64	1100	31.12	17.57	2.72
800	23.11	27.08	16.86	9.73	1.02	0.64	1200	30.76	17.20	2.76
900	22.81	27.10	16.14	9.02	1.02	0.62	1300	30.26	16.90	2.73
1000	22.47	26.89	15.33	8.37	1.01	0.62	1400	29.75	16.77	2.84
1100	22.14	26.80	14.62	7.78	1.00	0.61	1500	29.46	15.77	2.87
1200	21.81	26.67	14.00	7.26	1.00	0.60	1600	29.46	15.78	2.88
1300	21.43	26.67	13.46	6.82	1.00	0.59	1700	29.21	14.76	2.74
1400	21.07	26.50	12.87	6.39	0.99	0.58	1800	28.74	14.81	2.89
1500	20.70	26.40	12.38	6.04	0.99	0.58	1900	28.07	14.49	2.81
1600	20.31	26.39	12.02	5.78	1.00	0.56	2000	27.41	13.27	2.88
1700	19.94	26.24	11.57	5.46	0.99	0.56	2100	26.78	13.77	2.70
1800	19.58	26.10	11.21	5.20	0.99	0.56	2200	26.41	12.72	2.91
2000	18.80	26.02	10.48	4.78	1.00	0.54	2300	26.38	12.69	2.72
2200	18.04	25.88	9.81	4.41	1.01	0.53	2400	26.42	12.55	2.85
2400	17.27	25.78	9.29	4.17	1.03	0.52	2500	26.29	11.70	2.80
2600	16.52	25.72	8.68	3.94	1.05	0.51	2600	25.74	12.03	2.99
2800	15.76	25.61	8.18	3.78	1.08	0.51	2700	25.14	10.83	2.86
3000	14.99	25.56	7.54	3.56	1.09	0.51	2800	24.54	11.35	3.05
3200	14.20	25.47	6.93	3.44	1.12	0.52	2900	24.45	11.23	2.92
3400	13.46	25.49	6.37	3.25	1.14	0.52	3000	24.56	9.94	2.90
3600	12.65	25.65	5.84	3.13	1.18	0.53	3100	24.62	10.65	2.93
4000	10.94	25.89	4.85	2.88	1.26	0.54	3200	24.35	9.43	2.94
4500	8.79	26.55	3.84	2.59	1.38	0.57	3300	23.95	9.99	3.03
5000	6.58	27.22	3.12	2.32	1.50	0.59	3400	23.53	9.51	3.32
5500	4.26	28.15	2.62	2.06	1.70	0.62	3600	23.20	9.42	3.31
6000	1.94	29.02	2.27	1.83	1.92	0.65	3800	23.15	8.94	3.42
7000	-2.55	30.80	1.88	1.51	2.74	0.69	4000	22.59	7.72	3.44

Typical Performance Data

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

TEST CONDITIONS: Icc = 96mA, Vd=4.87V @Temperature = +25degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		FREQ	IP3 Output	1dB Comp. Output	Noise Figure
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Delta	(MHz)	(dBm)	(dBm)	(dB)
20	25.22	28.25	24.36	15.73	1.05	0.71	20	39.18	19.92	2.63
30	25.25	27.80	24.93	16.02	1.03	0.75	30	38.83	20.16	2.63
50	25.20	28.33	23.91	15.96	1.05	0.71	50	38.55	20.06	2.63
100	25.11	28.23	23.34	15.54	1.05	0.71	100	38.42	20.22	2.83
150	25.03	28.13	22.53	15.11	1.05	0.71	200	37.90	20.26	2.65
200	24.94	28.26	21.84	14.52	1.05	0.69	300	37.23	19.93	2.96
250	24.81	28.24	21.08	13.91	1.05	0.69	400	36.70	20.43	2.79
300	24.70	28.20	20.27	13.34	1.05	0.68	500	36.10	19.48	2.92
350	24.59	28.03	19.78	12.88	1.05	0.69	600	35.55	20.07	2.79
400	24.48	28.07	19.39	12.39	1.05	0.67	700	34.96	19.45	2.99
450	24.37	27.97	18.86	11.91	1.04	0.68	800	34.34	19.00	2.81
500	24.24	27.87	18.22	11.40	1.04	0.67	900	33.67	19.01	2.88
600	23.95	27.81	17.23	10.59	1.04	0.66	1000	32.89	18.16	2.79
700	23.68	27.75	16.52	9.76	1.03	0.65	1100	32.28	18.42	2.87
800	23.38	27.65	15.68	9.05	1.03	0.64	1200	31.82	17.81	2.89
900	23.06	27.61	15.09	8.41	1.03	0.63	1300	31.32	17.62	2.87
1000	22.71	27.45	14.42	7.83	1.02	0.62	1400	30.85	17.41	2.95
1100	22.37	27.33	13.83	7.31	1.01	0.61	1500	30.51	16.46	3.00
1200	22.02	27.22	13.30	6.85	1.01	0.60	1600	30.50	16.54	2.99
1300	21.63	27.13	12.82	6.44	1.01	0.59	1700	30.19	15.45	2.89
1400	21.27	27.11	12.29	6.05	1.01	0.58	1800	29.68	15.62	3.03
1500	20.88	27.00	11.88	5.74	1.01	0.57	1900	29.06	15.28	2.95
1600	20.49	26.98	11.58	5.50	1.02	0.56	2000	28.41	14.10	3.01
1700	20.12	26.81	11.17	5.21	1.01	0.56	2100	27.79	14.61	2.86
1800	19.75	26.73	10.83	4.98	1.01	0.55	2200	27.40	13.50	3.06
2000	18.97	26.57	10.16	4.58	1.02	0.54	2300	27.35	13.55	2.89
2200	18.20	26.38	9.51	4.24	1.03	0.54	2400	27.43	13.38	3.02
2400	17.43	26.34	9.06	4.01	1.05	0.53	2500	27.23	12.54	2.96
2600	16.68	26.27	8.48	3.79	1.07	0.52	2600	26.70	12.88	3.16
2800	15.92	26.14	8.02	3.64	1.10	0.52	2700	26.08	11.64	3.02
3000	15.14	26.01	7.41	3.42	1.11	0.52	2800	25.47	12.21	3.23
3200	14.36	26.02	6.83	3.29	1.15	0.52	2900	25.37	12.01	3.09
3400	13.63	25.96	6.28	3.10	1.15	0.53	3000	25.46	10.74	3.12
3600	12.82	26.11	5.75	2.98	1.20	0.54	3100	25.54	11.49	3.14
4000	11.10	26.38	4.78	2.73	1.28	0.55	3200	25.26	10.12	3.17
4500	8.97	26.92	3.80	2.43	1.38	0.58	3300	24.86	10.81	3.25
5000	6.76	27.61	3.08	2.18	1.50	0.61	3400	24.43	10.27	3.54
5500	4.42	28.49	2.59	1.93	1.69	0.63	3600	24.10	10.22	3.57
6000	2.10	29.37	2.25	1.72	1.91	0.66	3800	23.99	9.73	3.68
7000	-2.41	30.98	1.85	1.41	2.64	0.70	4000	23.49	8.48	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: Icc = 80mA, Vd=5.08V @Temperature = -45degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		FREQ	IP3 Output	1dB Comp. Output	Noise Figure
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Delta	(MHz)	(dBm)	(dBm)	(dB)
20	25.20	27.93	25.55	16.10	1.04	0.74	20	37.28	20.30	2.22
30	25.23	28.14	27.11	16.72	1.05	0.72	30	37.08	20.47	2.25
50	25.19	28.25	25.97	16.68	1.05	0.71	50	36.97	20.47	2.21
100	25.11	28.21	25.61	16.33	1.05	0.71	100	37.07	20.48	2.36
150	25.03	27.97	25.04	15.82	1.04	0.72	200	37.04	20.44	2.20
200	24.95	28.06	23.79	15.24	1.05	0.71	300	36.79	20.07	2.46
250	24.84	27.98	22.39	14.44	1.04	0.70	400	36.58	20.30	2.32
300	24.73	27.97	21.39	13.75	1.04	0.70	500	36.29	19.82	2.39
350	24.62	28.02	20.82	13.24	1.05	0.69	600	36.00	20.00	2.28
400	24.52	27.85	20.14	12.69	1.04	0.69	700	35.58	19.76	2.44
450	24.41	27.88	19.61	12.17	1.04	0.68	800	35.14	19.44	2.30
500	24.29	27.82	18.97	11.61	1.03	0.68	900	34.62	19.50	2.34
600	24.02	27.68	17.86	10.81	1.03	0.67	1000	33.95	18.82	2.25
700	23.76	27.56	17.00	9.89	1.02	0.66	1100	33.42	18.96	2.32
800	23.48	27.58	16.05	9.13	1.02	0.65	1200	33.06	18.47	2.33
900	23.17	27.44	15.32	8.46	1.01	0.64	1300	32.58	18.22	2.35
1000	22.83	27.32	14.60	7.85	1.01	0.63	1400	32.17	17.94	2.39
1100	22.50	27.20	13.99	7.29	1.00	0.62	1500	31.86	17.11	2.46
1200	22.15	27.16	13.44	6.80	1.00	0.61	1600	31.83	17.06	2.44
1300	21.78	27.06	12.92	6.40	1.00	0.60	1700	31.50	16.08	2.34
1400	21.42	26.92	12.43	5.99	0.99	0.60	1800	31.04	16.11	2.46
1500	21.06	26.85	11.97	5.66	0.99	0.59	1900	30.46	15.75	2.40
1600	20.67	26.80	11.61	5.41	0.99	0.58	2000	29.81	14.72	2.44
1700	20.32	26.67	11.20	5.11	0.99	0.58	2100	29.18	15.02	2.29
1800	19.96	26.59	10.91	4.87	0.99	0.57	2200	28.75	13.99	2.47
2000	19.21	26.47	10.23	4.47	0.99	0.56	2300	28.71	14.02	2.29
2200	18.46	26.29	9.57	4.12	0.99	0.55	2400	28.79	13.81	2.42
2400	17.70	26.12	9.09	3.84	1.00	0.55	2500	28.65	13.14	2.35
2600	16.99	26.09	8.53	3.62	1.02	0.54	2600	28.18	13.30	2.55
2800	16.24	26.00	8.05	3.47	1.05	0.54	2700	27.56	12.22	2.38
3000	15.47	25.85	7.40	3.21	1.05	0.54	2800	26.91	12.66	2.57
3200	14.71	25.81	6.83	3.09	1.08	0.55	2900	26.77	12.41	2.46
3400	13.99	25.73	6.25	2.90	1.08	0.56	3000	26.83	11.44	2.49
3600	13.16	26.01	5.72	2.75	1.12	0.56	3100	26.92	11.90	2.47
4000	11.51	26.27	4.74	2.51	1.19	0.57	3200	26.72	10.72	2.50
4500	9.47	26.76	3.78	2.24	1.26	0.60	3300	26.34	11.27	2.54
5000	7.35	27.29	3.05	1.97	1.33	0.63	3400	25.86	10.68	2.89
5500	5.06	28.30	2.52	1.69	1.45	0.66	3600	25.45	10.60	2.88
6000	2.69	29.10	2.12	1.46	1.57	0.69	3800	25.40	10.11	3.03
7000	-1.99	31.00	1.64	1.18	2.10	0.74	4000	24.88	9.11	2.93

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: Icc = 64mA, Vd=5.03V @Temperature = -45degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		FREQ	IP3 Output	1dB Comp. Output	Noise Figure
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Delta	(MHz)	(dBm)	(dBm)	(dB)
20	24.98	27.59	30.16	17.85	1.04	0.74	20	34.12	19.15	2.20
30	25.02	28.26	32.30	18.41	1.06	0.69	30	33.93	18.95	2.20
50	24.97	27.85	30.89	18.29	1.05	0.72	50	33.81	19.08	2.16
100	24.90	27.92	29.29	17.80	1.05	0.71	100	33.90	19.00	2.29
150	24.83	27.93	27.95	17.17	1.05	0.70	200	33.99	19.13	2.18
200	24.75	27.72	26.01	16.35	1.04	0.71	300	33.97	18.82	2.40
250	24.64	27.80	24.38	15.42	1.05	0.70	400	34.00	18.89	2.27
300	24.53	27.80	23.03	14.66	1.05	0.69	500	33.93	18.60	2.32
350	24.43	27.66	22.22	14.07	1.04	0.69	600	33.88	18.60	2.27
400	24.34	27.55	21.50	13.39	1.03	0.69	700	33.66	18.49	2.38
450	24.22	27.37	20.79	12.85	1.03	0.70	800	33.50	18.25	2.26
500	24.10	27.43	20.07	12.25	1.03	0.69	900	33.33	18.44	2.29
600	23.85	27.45	18.81	11.33	1.03	0.67	1000	32.96	18.08	2.22
700	23.60	27.34	17.76	10.34	1.02	0.66	1100	32.66	18.19	2.26
800	23.32	27.18	16.69	9.50	1.01	0.66	1200	32.39	17.94	2.29
900	23.02	27.08	15.91	8.79	1.00	0.65	1300	31.96	17.71	2.29
1000	22.69	27.00	15.12	8.14	1.00	0.63	1400	31.52	17.56	2.34
1100	22.37	26.89	14.46	7.55	0.99	0.63	1500	31.23	16.69	2.40
1200	22.04	26.78	13.86	7.03	0.99	0.62	1600	31.27	16.64	2.37
1300	21.66	26.71	13.28	6.59	0.99	0.61	1700	30.98	15.68	2.26
1400	21.31	26.65	12.74	6.18	0.98	0.60	1800	30.53	15.69	2.40
1500	20.96	26.46	12.26	5.84	0.98	0.60	1900	29.95	15.35	2.33
1600	20.57	26.52	11.88	5.58	0.98	0.58	2000	29.30	14.29	2.38
1700	20.22	26.35	11.44	5.25	0.98	0.58	2100	28.67	14.60	2.22
1800	19.85	26.30	11.11	5.01	0.98	0.57	2200	28.26	13.59	2.40
2000	19.12	26.17	10.41	4.58	0.98	0.56	2300	28.21	13.58	2.24
2200	18.37	25.94	9.72	4.21	0.98	0.55	2400	28.29	13.41	2.33
2400	17.61	25.88	9.22	3.94	1.00	0.54	2500	28.14	12.71	2.28
2600	16.90	25.85	8.64	3.70	1.01	0.54	2600	27.66	12.88	2.48
2800	16.16	25.75	8.15	3.54	1.04	0.53	2700	27.03	11.88	2.33
3000	15.39	25.65	7.49	3.29	1.05	0.54	2800	26.40	12.23	2.52
3200	14.62	25.58	6.89	3.17	1.07	0.54	2900	26.27	12.02	2.39
3400	13.90	25.55	6.31	2.98	1.08	0.55	3000	26.33	11.02	2.41
3600	13.08	25.72	5.76	2.82	1.11	0.55	3100	26.39	11.50	2.37
4000	11.42	25.96	4.78	2.58	1.18	0.57	3200	26.18	10.35	2.41
4500	9.37	26.43	3.81	2.32	1.25	0.59	3300	25.84	10.88	2.47
5000	7.25	27.22	3.08	2.04	1.34	0.62	3400	25.31	10.31	2.82
5500	4.98	28.18	2.54	1.76	1.46	0.65	3600	24.98	10.22	2.76
6000	2.60	28.92	2.14	1.53	1.58	0.68	3800	24.89	9.74	2.92
7000	-2.07	30.94	1.65	1.24	2.15	0.73	4000	24.44	8.78	2.81

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: Icc = 96mA, Vd=5.13V @Temperature = -45degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		FREQ	IP3 Output	1dB Comp. Output	Noise Figure
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Delta	(MHz)	(dBm)	(dBm)	(dB)
20	25.33	28.80	24.11	15.47	1.07	0.68	20	39.61	20.58	2.27
30	25.36	27.94	24.16	15.88	1.03	0.75	30	39.40	20.83	2.27
50	25.32	28.32	23.70	15.74	1.05	0.72	50	39.28	20.82	2.25
100	25.24	28.35	23.68	15.45	1.05	0.71	100	39.38	20.92	2.40
150	25.16	28.15	23.11	15.09	1.04	0.72	200	39.04	20.99	2.23
200	25.07	28.36	22.29	14.50	1.05	0.69	300	38.48	20.66	2.55
250	24.96	28.19	21.32	13.84	1.05	0.70	400	38.02	21.09	2.34
300	24.85	28.33	20.30	13.19	1.05	0.68	500	37.52	20.23	2.45
350	24.74	28.11	19.85	12.73	1.04	0.69	600	37.03	20.77	2.33
400	24.63	28.01	19.36	12.24	1.04	0.69	700	36.48	20.22	2.49
450	24.53	27.98	18.83	11.74	1.03	0.69	800	35.89	19.81	2.34
500	24.40	27.97	18.23	11.27	1.03	0.68	900	35.23	19.79	2.39
600	24.13	27.82	17.23	10.49	1.03	0.67	1000	34.46	19.02	2.30
700	23.86	27.82	16.46	9.62	1.03	0.66	1100	33.87	19.23	2.37
800	23.57	27.67	15.59	8.90	1.02	0.65	1200	33.46	18.68	2.37
900	23.26	27.60	14.91	8.25	1.01	0.64	1300	33.00	18.46	2.40
1000	22.92	27.52	14.26	7.67	1.01	0.63	1400	32.59	18.19	2.43
1100	22.58	27.43	13.68	7.13	1.01	0.62	1500	32.31	17.39	2.53
1200	22.24	27.33	13.15	6.66	1.00	0.62	1600	32.26	17.37	2.49
1300	21.86	27.26	12.66	6.26	1.00	0.60	1700	31.91	16.39	2.39
1400	21.50	27.15	12.18	5.88	1.00	0.60	1800	31.46	16.45	2.51
1500	21.14	27.06	11.76	5.56	0.99	0.59	1900	30.88	16.09	2.45
1600	20.75	26.99	11.41	5.32	1.00	0.58	2000	30.23	15.07	2.50
1700	20.39	26.84	11.03	5.02	0.99	0.58	2100	29.60	15.40	2.33
1800	20.03	26.77	10.73	4.79	0.99	0.57	2200	29.19	14.36	2.51
2000	19.27	26.63	10.08	4.40	1.00	0.56	2300	29.15	14.41	2.38
2200	18.53	26.49	9.45	4.04	1.00	0.55	2400	29.24	14.19	2.46
2400	17.78	26.32	8.98	3.78	1.01	0.55	2500	29.13	13.50	2.45
2600	17.05	26.26	8.43	3.56	1.03	0.54	2600	28.64	13.68	2.63
2800	16.33	26.22	7.96	3.42	1.06	0.54	2700	28.03	12.59	2.46
3000	15.55	26.02	7.33	3.16	1.06	0.55	2800	27.37	13.02	2.67
3200	14.78	26.00	6.77	3.03	1.08	0.55	2900	27.25	12.76	2.56
3400	14.07	26.02	6.20	2.84	1.09	0.56	3000	27.29	11.81	2.57
3600	13.25	26.15	5.67	2.68	1.12	0.56	3100	27.38	12.27	2.54
4000	11.59	26.39	4.71	2.45	1.18	0.58	3200	27.19	11.12	2.59
4500	9.55	26.86	3.75	2.17	1.25	0.61	3300	26.78	11.63	2.63
5000	7.42	27.55	3.03	1.91	1.33	0.64	3400	26.30	11.05	2.99
5500	5.16	28.46	2.50	1.64	1.43	0.67	3600	25.90	10.98	2.98
6000	2.76	29.09	2.10	1.40	1.53	0.70	3800	25.84	10.48	3.10
7000	-1.92	31.17	1.64	1.14	2.08	0.74	4000	25.36	9.49	3.05

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: Icc = 80mA, Vd=4.63V @Temperature = +85degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		FREQ	IP3 Output	1dB Comp. Output	Noise Figure
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Delta	(MHz)	(dBm)	(dBm)	(dB)
20	24.93	27.72	28.43	17.37	1.04	0.73	20	36.25	19.27	2.89
30	24.96	27.61	29.15	17.69	1.04	0.74	30	35.96	19.45	2.90
50	24.91	27.92	27.33	17.59	1.05	0.71	50	35.79	19.46	2.89
100	24.82	27.85	26.13	17.00	1.05	0.71	100	35.81	19.51	3.09
150	24.73	27.95	24.95	16.23	1.06	0.70	200	35.56	19.48	2.96
200	24.64	27.90	23.69	15.53	1.05	0.69	300	35.06	19.04	3.26
250	24.52	28.02	22.59	14.86	1.06	0.67	400	34.65	19.42	3.10
300	24.40	27.93	21.71	14.19	1.06	0.67	500	34.14	18.73	3.19
350	24.28	27.84	21.41	13.73	1.05	0.67	600	33.66	19.10	3.10
400	24.18	27.73	20.89	13.16	1.05	0.67	700	33.15	18.66	3.26
450	24.06	27.70	20.34	12.63	1.05	0.66	800	32.59	18.18	3.13
500	23.93	27.62	19.64	12.05	1.04	0.66	900	31.98	18.22	3.19
600	23.65	27.54	18.45	11.19	1.04	0.65	1000	31.26	17.43	3.11
700	23.37	27.47	17.60	10.28	1.04	0.64	1100	30.67	17.58	3.14
800	23.07	27.34	16.63	9.52	1.03	0.63	1200	30.21	17.03	3.21
900	22.75	27.25	16.01	8.85	1.03	0.62	1300	29.67	16.77	3.19
1000	22.41	27.14	15.30	8.23	1.02	0.61	1400	29.16	16.58	3.28
1100	22.05	27.02	14.64	7.70	1.02	0.60	1500	28.83	15.57	3.34
1200	21.70	26.89	14.05	7.20	1.01	0.59	1600	28.81	15.62	3.34
1300	21.30	26.87	13.53	6.77	1.02	0.57	1700	28.53	14.59	3.21
1400	20.92	26.73	13.00	6.36	1.01	0.57	1800	28.02	14.67	3.37
1500	20.54	26.59	12.57	6.03	1.01	0.56	1900	27.37	14.36	3.27
1600	20.14	26.63	12.24	5.77	1.02	0.54	2000	26.72	13.09	3.37
1700	19.75	26.50	11.78	5.48	1.02	0.54	2100	26.10	13.67	3.19
1800	19.37	26.39	11.40	5.25	1.03	0.53	2200	25.73	12.55	3.40
2000	18.57	26.21	10.60	4.83	1.03	0.52	2300	25.67	12.56	3.23
2200	17.78	26.11	9.94	4.47	1.05	0.51	2400	25.73	12.44	3.36
2400	16.99	25.98	9.42	4.25	1.07	0.50	2500	25.50	11.52	3.30
2600	16.20	25.92	8.76	4.04	1.10	0.50	2600	24.97	11.94	3.52
2800	15.42	25.81	8.25	3.90	1.14	0.49	2700	24.38	10.68	3.37
3000	14.64	25.71	7.62	3.70	1.16	0.50	2800	23.79	11.22	3.56
3200	13.84	25.66	7.05	3.57	1.19	0.50	2900	23.72	11.11	3.47
3400	13.09	25.67	6.49	3.41	1.22	0.50	3000	23.83	9.69	3.44
3600	12.28	25.81	5.94	3.28	1.26	0.51	3100	23.87	10.57	3.50
4000	10.55	26.13	4.92	3.02	1.37	0.52	3200	23.59	9.21	3.49
4500	8.35	26.66	3.89	2.70	1.48	0.55	3300	23.18	9.92	3.59
5000	6.11	27.41	3.17	2.47	1.66	0.58	3400	22.78	9.44	3.85
5500	3.74	28.35	2.68	2.24	1.92	0.60	3600	22.53	9.38	3.89
6000	1.43	29.19	2.39	2.04	2.26	0.62	3800	22.40	8.87	3.96
7000	-2.97	30.94	2.08	1.73	3.43	0.66	4000	21.97	7.57	4.06

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: Icc = 64mA, Vd=4.58V @Temperature = +85degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		FREQ	IP3 Output	1dB Comp. Output	Noise Figure
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Delta	(MHz)	(dBm)	(dBm)	(dB)
20	24.65	27.83	36.34	19.51	1.06	0.70	20	33.33	18.59	2.86
30	24.68	27.29	38.66	20.13	1.04	0.74	30	33.11	18.45	2.86
50	24.64	27.64	35.27	19.91	1.05	0.71	50	32.94	18.46	2.84
100	24.55	27.68	31.44	18.99	1.06	0.70	100	33.01	18.44	3.01
150	24.47	27.86	28.66	18.08	1.07	0.68	200	33.00	18.54	2.92
200	24.38	27.49	26.81	17.09	1.05	0.70	300	32.76	18.14	3.18
250	24.26	27.52	25.02	16.13	1.05	0.69	400	32.58	18.32	3.04
300	24.15	27.50	23.84	15.35	1.05	0.68	500	32.31	17.97	3.12
350	24.05	27.52	23.21	14.75	1.05	0.67	600	32.07	18.04	3.06
400	23.95	27.43	22.49	14.10	1.05	0.67	700	31.72	17.91	3.18
450	23.84	27.40	21.77	13.49	1.05	0.66	800	31.39	17.47	3.09
500	23.71	27.21	20.93	12.83	1.04	0.67	900	31.02	17.64	3.11
600	23.44	27.23	19.53	11.85	1.04	0.65	1000	30.46	17.02	3.08
700	23.16	27.11	18.49	10.83	1.03	0.64	1100	30.02	17.08	3.08
800	22.89	26.95	17.37	9.98	1.02	0.63	1200	29.62	16.67	3.16
900	22.58	26.89	16.68	9.26	1.02	0.62	1300	29.08	16.34	3.13
1000	22.24	26.75	15.85	8.59	1.01	0.61	1400	28.57	16.21	3.23
1100	21.90	26.64	15.12	8.01	1.01	0.60	1500	28.25	15.16	3.24
1200	21.56	26.55	14.51	7.47	1.01	0.59	1600	28.25	15.17	3.26
1300	21.16	26.40	13.91	7.02	1.00	0.58	1700	28.00	14.18	3.13
1400	20.79	26.37	13.33	6.58	1.00	0.57	1800	27.49	14.21	3.30
1500	20.41	26.30	12.88	6.22	1.00	0.56	1900	26.84	13.93	3.20
1600	20.02	26.20	12.51	5.95	1.01	0.55	2000	26.19	12.61	3.29
1700	19.65	26.05	12.03	5.64	1.00	0.54	2100	25.58	13.21	3.09
1800	19.27	25.94	11.61	5.40	1.00	0.54	2200	25.20	12.10	3.31
2000	18.48	25.89	10.80	4.95	1.02	0.52	2300	25.14	12.05	3.12
2200	17.68	25.81	10.08	4.59	1.03	0.51	2400	25.20	11.99	3.27
2400	16.88	25.62	9.55	4.35	1.06	0.50	2500	24.95	11.06	3.20
2600	16.11	25.55	8.87	4.14	1.08	0.50	2600	24.43	11.47	3.42
2800	15.33	25.48	8.33	3.99	1.12	0.49	2700	23.83	10.23	3.24
3000	14.54	25.40	7.69	3.79	1.14	0.49	2800	23.25	10.76	3.45
3200	13.74	25.35	7.10	3.66	1.18	0.49	2900	23.19	10.68	3.36
3400	13.00	25.33	6.53	3.50	1.20	0.50	3000	23.30	9.22	3.34
3600	12.18	25.55	5.97	3.37	1.26	0.50	3100	23.36	10.11	3.40
4000	10.45	25.80	4.95	3.11	1.35	0.52	3200	23.07	8.80	3.37
4500	8.25	26.46	3.91	2.79	1.48	0.54	3300	22.68	9.48	3.51
5000	6.01	27.20	3.19	2.56	1.66	0.57	3400	22.26	9.01	3.75
5500	3.66	28.18	2.69	2.31	1.93	0.59	3600	22.01	8.95	3.74
6000	1.35	29.10	2.41	2.10	2.29	0.62	3800	21.88	8.44	3.86
7000	-3.04	30.92	2.09	1.79	3.51	0.65	4000	21.45	7.14	3.89

Typical Performance Data

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

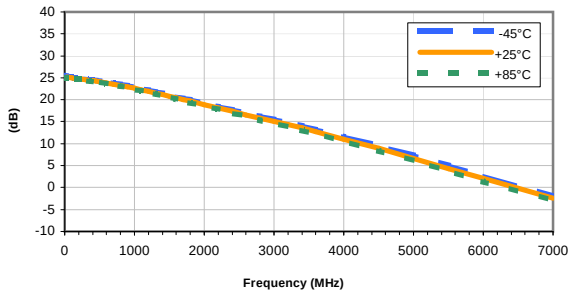
TEST CONDITIONS: Icc = 96mA, Vd=4.68V @Temperature = +85degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		FREQ	IP3 Output	1dB Comp. Output	Noise Figure
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Delta	(MHz)	(dBm)	(dBm)	(dB)
20	25.08	28.64	24.58	16.20	1.07	0.67	20	38.33	19.40	2.96
30	25.12	28.23	25.58	16.54	1.05	0.71	30	38.01	19.65	2.96
50	25.07	28.16	24.57	16.45	1.05	0.71	50	37.76	19.74	2.97
100	24.98	28.11	23.69	15.90	1.05	0.71	100	37.67	19.72	3.17
150	24.88	27.93	22.88	15.37	1.05	0.71	200	37.07	19.72	3.01
200	24.79	28.08	21.87	14.71	1.05	0.70	300	36.31	19.47	3.33
250	24.65	28.29	21.22	14.08	1.06	0.67	400	35.68	19.95	3.14
300	24.54	28.04	20.55	13.54	1.05	0.68	500	35.04	19.00	3.30
350	24.43	27.96	20.27	13.16	1.05	0.68	600	34.42	19.57	3.14
400	24.31	27.96	19.84	12.62	1.05	0.67	700	33.79	18.92	3.37
450	24.20	27.90	19.38	12.15	1.05	0.67	800	33.15	18.46	3.18
500	24.07	27.92	18.79	11.65	1.05	0.65	900	32.46	18.46	3.29
600	23.77	27.80	17.76	10.83	1.05	0.64	1000	31.69	17.60	3.18
700	23.49	27.70	16.98	9.96	1.04	0.63	1100	31.05	17.85	3.22
800	23.18	27.65	16.14	9.24	1.04	0.62	1200	30.59	17.24	3.26
900	22.85	27.45	15.56	8.61	1.03	0.62	1300	30.06	17.03	3.29
1000	22.50	27.31	14.89	8.04	1.03	0.61	1400	29.57	16.85	3.37
1100	22.14	27.19	14.27	7.51	1.02	0.60	1500	29.25	15.86	3.40
1200	21.79	27.22	13.74	7.03	1.03	0.58	1600	29.21	15.94	3.42
1300	21.38	27.07	13.24	6.63	1.03	0.57	1700	28.93	14.90	3.30
1400	21.01	26.98	12.74	6.23	1.02	0.57	1800	28.43	15.04	3.45
1500	20.62	26.89	12.35	5.91	1.02	0.56	1900	27.80	14.73	3.34
1600	20.22	26.87	12.03	5.67	1.03	0.54	2000	27.16	13.47	3.46
1700	19.84	26.74	11.59	5.38	1.03	0.54	2100	26.55	14.06	3.26
1800	19.45	26.64	11.22	5.16	1.04	0.53	2200	26.17	12.93	3.48
2000	18.64	26.50	10.48	4.76	1.05	0.52	2300	26.13	12.98	3.31
2200	17.84	26.39	9.80	4.42	1.06	0.51	2400	26.17	12.85	3.45
2400	17.05	26.17	9.32	4.19	1.08	0.51	2500	25.95	11.95	3.40
2600	16.27	26.06	8.68	3.99	1.11	0.50	2600	25.44	12.34	3.62
2800	15.49	26.10	8.17	3.84	1.15	0.49	2700	24.85	11.09	3.47
3000	14.71	25.93	7.55	3.64	1.17	0.50	2800	24.25	11.66	3.67
3200	13.91	25.88	6.99	3.52	1.20	0.50	2900	24.18	11.51	3.59
3400	13.17	25.89	6.43	3.35	1.23	0.51	3000	24.27	10.14	3.55
3600	12.36	25.97	5.89	3.23	1.27	0.51	3100	24.31	10.97	3.63
4000	10.63	26.21	4.89	2.97	1.36	0.53	3200	24.02	9.63	3.63
4500	8.43	26.85	3.87	2.64	1.49	0.56	3300	23.65	10.33	3.74
5000	6.17	27.57	3.16	2.42	1.66	0.58	3400	23.21	9.81	4.00
5500	3.81	28.54	2.66	2.19	1.92	0.61	3600	22.99	9.77	4.03
6000	1.50	29.40	2.37	1.99	2.26	0.63	3800	22.86	9.28	4.09
7000	-2.90	31.06	2.06	1.69	3.40	0.66	4000	22.40	7.96	4.22

Typical Performance Curves

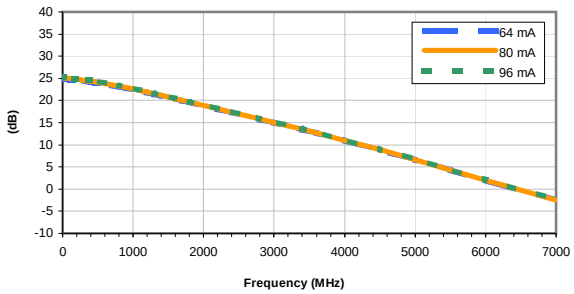
GAIN vs. TEMPERATURE

INPUT POWER = -20dB, CURRENT = 80 mA



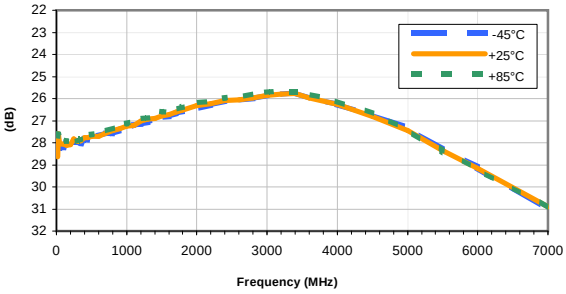
GAIN vs. CURRENT

INPUT POWER = -20dB, Temperature = +25°C



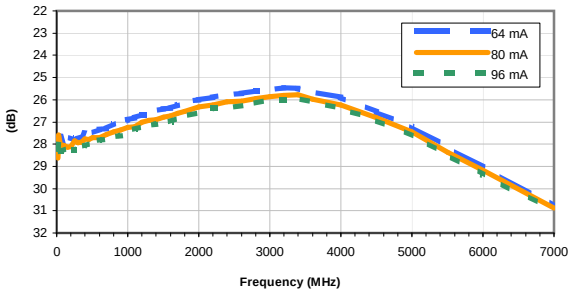
ISOLATION vs. TEMPERATURE

INPUT POWER = -20dB, CURRENT = 80 mA



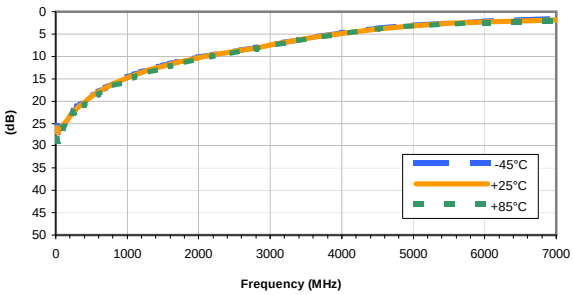
ISOLATION vs. CURRENT

INPUT POWER = -20dB, Temperature = +25°C



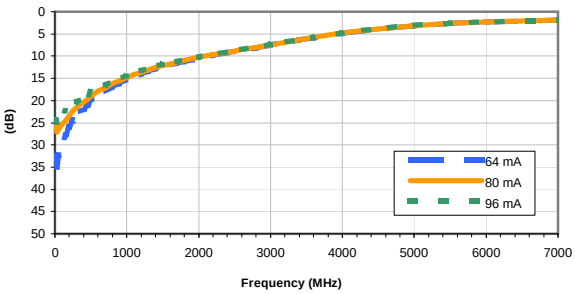
INPUT RETURN LOSS vs. TEMPERATURE

INPUT POWER = -20dB, CURRENT = 80 mA



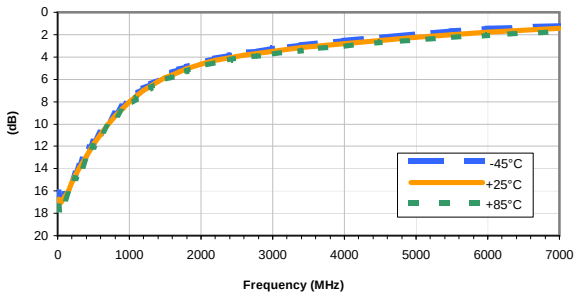
INPUT RETURN LOSS vs. CURRENT

INPUT POWER = -20dB, Temperature = +25°C



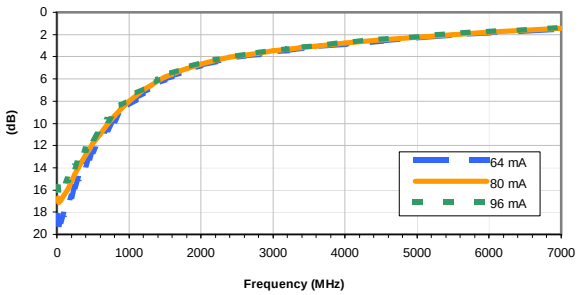
OUTPUT RETURN LOSS vs. TEMPERATURE

INPUT POWER = -20dB, CURRENT = 80 mA



OUTPUT RETURN LOSS vs. CURRENT

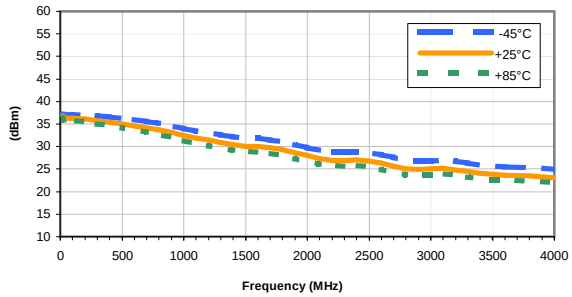
INPUT POWER = -20dB, Temperature = +25°C



Typical Performance Curves

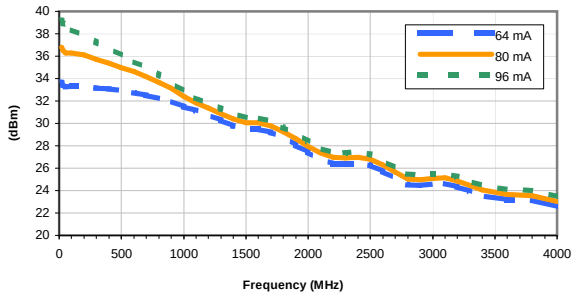
OUTPUT IP3 vs. TEMPERATURE

INPUT POWER = -20dB, CURRENT = 80 mA



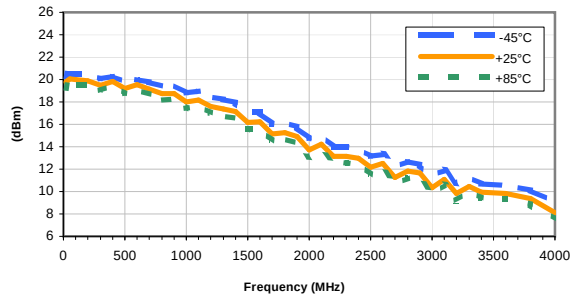
OUTPUT IP-3 vs. CURRENT

INPUT POWER = -20dB, Temperature = +25°C



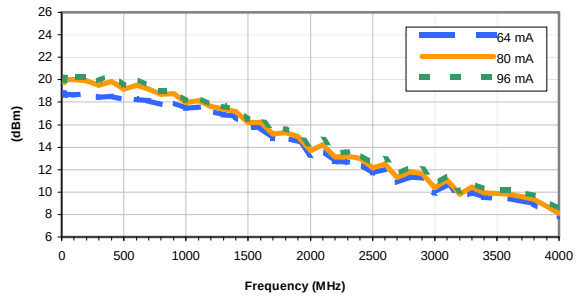
OUTPUT POWER at 1dB Compression vs. TEMPERATURE

CURRENT = 80 mA



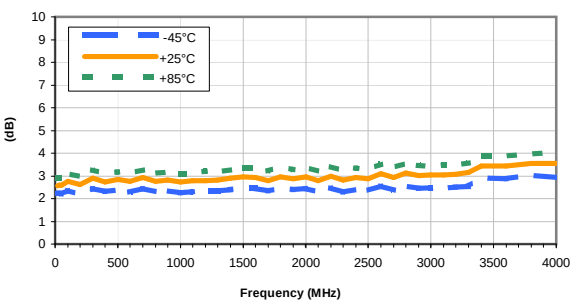
OUTPUT POWER at 1dB Compression vs. CURRENT

Temperature = +25°C



Noise Figure vs. TEMPERATURE

CURRENT = 80 mA



Noise Figure vs. CURRENT

Temperature = +25°C