

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 = 40mA, Vd = 3.64V @ 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)
50	12.55	17.21	27.42	42.62	1.15	0.58	50	27.48	12.15	4.06
100	12.55	17.24	27.60	41.22	1.15	0.58	100	27.69	11.80	4.10
200	12.52	17.24	27.55	40.05	1.15	0.58	200	27.99	12.31	4.10
400	12.46	17.23	27.42	36.13	1.15	0.58	400	27.33	12.12	4.16
600	12.42	17.21	27.66	32.89	1.15	0.58	600	26.73	11.98	4.10
800	12.35	17.20	28.20	31.02	1.16	0.57	800	26.95	11.76	4.16
1000	12.29	17.19	28.71	29.50	1.16	0.57	1000	26.78	11.60	4.16
1200	12.24	17.18	28.87	28.00	1.16	0.57	1200	26.69	11.78	4.18
1400	12.17	17.16	29.24	27.47	1.17	0.56	1400	26.62	11.97	4.20
1600	12.11	17.14	29.51	26.42	1.17	0.56	1600	27.68	11.90	4.15
1800	12.04	17.11	29.44	25.81	1.17	0.56	1800	27.85	11.93	4.20
2000	11.99	17.08	29.54	25.52	1.17	0.56	2000	27.55	11.98	4.18
2200	11.92	17.06	29.11	25.22	1.18	0.55	2200	27.53	11.67	4.14
2400	11.86	17.02	28.43	25.18	1.18	0.55	2400	27.55	11.15	4.18
2600	11.80	17.01	27.88	25.15	1.18	0.55	2600	27.71	11.16	4.20
2800	11.72	16.96	27.22	25.15	1.18	0.55	2800	27.88	11.34	4.17
3000	11.65	16.92	26.24	25.53	1.18	0.54	3000	28.23	11.58	4.20
3500	11.47	16.82	24.07	26.79	1.19	0.54	3200	27.88	11.53	4.19
4000	11.27	16.69	22.75	29.35	1.19	0.53	3400	27.95	11.59	4.14
4500	11.07	16.54	22.35	32.32	1.20	0.53	3600	27.82	11.65	4.15
5000	10.85	16.40	22.95	30.56	1.20	0.53	3800	27.59	11.57	4.17
5500	10.62	16.23	24.70	24.95	1.21	0.52	4000	27.73	11.48	4.19
6000	10.37	16.05	26.03	21.16	1.21	0.52	4200	27.82	11.44	4.22
6500	10.13	15.93	25.07	18.74	1.22	0.51	4400	27.67	11.58	4.19
7000	9.89	15.77	23.63	16.59	1.22	0.51	4600	27.44	11.90	4.21
7500	9.71	15.61	22.08	15.03	1.21	0.52	4800	27.05	12.42	4.28
8000	9.52	15.47	20.07	13.52	1.21	0.52	5000	27.03	12.52	4.31
8500	9.29	15.37	17.60	11.85	1.20	0.53	5200	27.05	12.66	4.22
9000	8.99	15.27	15.15	10.28	1.20	0.54	5400	26.98	12.73	4.23
10000	8.10	15.27	11.29	7.73	1.20	0.55	5600	26.52	12.41	4.17
11000	6.86	15.30	8.76	6.21	1.23	0.55	5800	26.04	12.69	4.22
12000	5.44	15.32	6.91	5.34	1.26	0.55	6000	25.72	12.79	4.29
13000	4.08	15.29	5.70	4.74	1.27	0.55	6200	25.66	12.95	4.31
14000	2.66	15.56	4.73	4.12	1.25	0.54	6400	25.60	12.96	4.32
15000	1.58	15.94	4.18	4.07	1.24	0.50	6600	25.43	13.17	4.36
16000	1.37	15.68	4.40	4.77	1.23	0.41	6800	24.95	13.22	4.43
17000	1.64	14.93	5.18	6.75	1.32	0.29	7000	24.52	13.17	4.41
18000	1.96	14.00	5.96	9.46	1.38	0.24	7200	24.06	12.89	4.38
19000	1.90	13.63	5.62	9.29	1.33	0.29	7600	23.70	12.64	4.50
20000	1.44	14.77	4.72	7.47	1.34	0.30	8000	22.79	12.48	4.51

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*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 = 32mA, Vd = 3.56V @ Temperature = +25degC

FREQ (MHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		FREQ (MHz)	IP3 Output (dBm)	1dB Comp. Output (dBm)	Noise Figure (dB)
					K	Delta				
50	12.25	17.03	23.86	34.79	1.15	0.58	50	23.00	8.63	4.07
100	12.24	16.98	24.08	36.85	1.15	0.58	100	23.04	8.23	4.08
200	12.22	17.01	24.08	36.33	1.15	0.58	200	23.33	8.81	4.11
400	12.17	17.03	24.00	35.68	1.16	0.57	400	22.86	8.55	4.12
600	12.11	17.01	24.20	34.05	1.16	0.57	600	22.36	8.39	4.11
800	12.06	17.00	24.61	32.75	1.16	0.57	800	22.53	8.03	4.13
1000	11.99	16.98	24.98	31.84	1.17	0.56	1000	22.36	7.97	4.16
1200	11.94	16.98	25.21	29.96	1.17	0.56	1200	22.24	8.20	4.18
1400	11.88	16.94	25.43	29.38	1.17	0.56	1400	22.16	8.60	4.20
1600	11.83	16.93	25.66	28.30	1.17	0.56	1600	22.87	8.49	4.16
1800	11.76	16.90	25.71	27.21	1.18	0.55	1800	23.18	8.47	4.19
2000	11.72	16.87	25.62	26.82	1.18	0.55	2000	22.88	8.58	4.17
2200	11.66	16.84	25.29	26.25	1.18	0.55	2200	22.87	8.10	4.13
2400	11.60	16.82	24.83	25.89	1.18	0.55	2400	22.97	7.53	4.18
2600	11.53	16.79	24.42	25.67	1.18	0.55	2600	23.22	7.55	4.19
2800	11.47	16.75	23.97	25.44	1.18	0.54	2800	23.48	7.93	4.15
3000	11.41	16.71	23.19	25.57	1.18	0.54	3000	23.57	8.13	4.20
3500	11.23	16.62	21.62	26.38	1.19	0.54	3200	23.31	8.16	4.16
4000	11.05	16.49	20.63	28.55	1.19	0.53	3400	23.29	8.28	4.12
4500	10.87	16.34	20.29	32.91	1.19	0.53	3600	23.44	8.35	4.08
5000	10.66	16.20	20.78	35.50	1.20	0.53	3800	23.68	8.19	4.17
5500	10.45	16.04	22.06	27.35	1.20	0.52	4000	24.01	8.10	4.18
6000	10.21	15.87	23.14	22.49	1.21	0.52	4200	24.01	8.11	4.18
6500	10.00	15.74	22.68	19.64	1.21	0.52	4400	24.12	8.22	4.16
7000	9.77	15.58	21.92	17.24	1.21	0.51	4600	24.14	8.63	4.15
7500	9.59	15.44	20.85	15.54	1.21	0.52	4800	24.37	9.27	4.19
8000	9.41	15.32	19.36	13.89	1.20	0.52	5000	24.38	9.31	4.22
8500	9.19	15.23	17.24	12.15	1.20	0.53	5200	24.17	9.49	4.19
9000	8.88	15.16	14.99	10.53	1.20	0.53	5400	23.87	9.58	4.20
10000	7.98	15.19	11.25	7.95	1.21	0.54	5600	23.97	9.10	4.15
11000	6.74	15.25	8.77	6.45	1.24	0.54	5800	24.13	9.69	4.16
12000	5.33	15.32	6.92	5.60	1.28	0.54	6000	24.64	9.91	4.17
13000	3.97	15.31	5.70	5.02	1.29	0.53	6200	25.20	10.38	4.22
14000	2.55	15.59	4.74	4.40	1.27	0.52	6400	25.13	10.61	4.26
15000	1.43	15.98	4.19	4.39	1.27	0.47	6600	24.77	11.30	4.31
16000	1.14	15.76	4.38	5.11	1.26	0.38	6800	24.41	11.49	4.37
17000	1.28	15.08	5.06	7.07	1.36	0.25	7000	24.29	11.43	4.35
18000	1.56	14.22	5.76	9.71	1.43	0.20	7200	24.02	11.01	4.32
19000	1.54	13.84	5.44	9.56	1.37	0.25	7600	23.72	11.13	4.40
20000	1.08	14.96	4.60	7.72	1.38	0.27	8000	22.63	11.31	4.48

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*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 = 48mA, Vd = 3.72V @ Temperature = +25degC

FREQ (MHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		FREQ (MHz)	IP3 Output (dBm)	1dB Comp. Output (dBm)	Noise Figure (dB)
					K	Delta				
50	12.71	17.32	30.06	33.89	1.14	0.59	50	30.86	14.30	4.11
100	12.70	17.32	29.91	33.11	1.14	0.59	100	31.02	14.15	4.16
200	12.68	17.35	30.14	33.04	1.15	0.58	200	31.38	14.28	4.13
400	12.62	17.34	30.00	31.74	1.15	0.58	400	30.57	14.26	4.18
600	12.57	17.33	30.14	29.88	1.15	0.58	600	29.80	14.21	4.13
800	12.50	17.33	30.84	28.59	1.16	0.57	800	30.03	14.07	4.22
1000	12.44	17.31	31.38	27.43	1.16	0.57	1000	29.80	13.87	4.22
1200	12.38	17.29	31.43	26.34	1.16	0.57	1200	29.81	13.92	4.22
1400	12.31	17.27	31.93	25.90	1.16	0.56	1400	29.71	14.05	4.23
1600	12.25	17.25	32.10	25.07	1.17	0.56	1600	31.34	13.94	4.21
1800	12.19	17.22	31.92	24.67	1.17	0.56	1800	30.72	13.98	4.22
2000	12.13	17.19	32.20	24.47	1.17	0.56	2000	30.48	14.06	4.22
2200	12.05	17.17	31.81	24.29	1.17	0.55	2200	30.37	13.90	4.18
2400	11.99	17.14	30.98	24.40	1.18	0.55	2400	30.31	13.56	4.21
2600	11.92	17.11	30.38	24.44	1.18	0.55	2600	30.13	13.45	4.23
2800	11.85	17.07	29.56	24.55	1.18	0.55	2800	30.26	13.52	4.22
3000	11.78	17.02	28.39	25.00	1.18	0.55	3000	30.57	13.65	4.22
3500	11.58	16.92	25.72	26.51	1.19	0.54	3200	29.99	13.65	4.21
4000	11.38	16.80	24.12	29.05	1.19	0.53	3400	30.15	13.63	4.21
4500	11.17	16.65	23.60	31.10	1.20	0.53	3600	29.47	13.66	4.21
5000	10.94	16.50	24.35	28.86	1.21	0.53	3800	29.06	13.65	4.25
5500	10.70	16.34	26.51	24.05	1.21	0.52	4000	29.05	13.65	4.27
6000	10.44	16.16	28.06	20.60	1.21	0.52	4200	28.89	13.68	4.27
6500	10.20	16.03	26.54	18.31	1.22	0.51	4400	28.90	13.71	4.23
7000	9.96	15.86	24.52	16.29	1.22	0.51	4600	28.30	13.99	4.26
7500	9.77	15.70	22.62	14.82	1.21	0.52	4800	27.85	14.34	4.34
8000	9.58	15.55	20.34	13.36	1.21	0.52	5000	27.58	14.38	4.34
8500	9.35	15.44	17.73	11.74	1.20	0.53	5200	27.64	14.37	4.29
9000	9.04	15.35	15.20	10.19	1.20	0.54	5400	27.49	14.30	4.28
10000	8.16	15.32	11.31	7.66	1.20	0.55	5600	27.10	14.20	4.24
11000	6.92	15.33	8.76	6.11	1.23	0.56	5800	26.58	14.27	4.27
12000	5.50	15.33	6.91	5.21	1.25	0.56	6000	25.99	14.26	4.32
13000	4.14	15.27	5.70	4.61	1.26	0.56	6200	25.42	14.19	4.36
14000	2.73	15.54	4.72	3.98	1.24	0.55	6400	25.35	14.06	4.43
15000	1.65	15.93	4.17	3.90	1.23	0.52	6600	25.37	14.16	4.45
16000	1.49	15.65	4.41	4.55	1.21	0.43	6800	25.14	14.10	4.47
17000	1.82	14.85	5.24	6.49	1.29	0.32	7000	24.49	13.98	4.48
18000	2.18	13.87	6.07	9.19	1.35	0.26	7200	23.89	13.71	4.43
19000	2.09	13.51	5.72	9.06	1.31	0.31	7600	23.60	13.32	4.57
20000	1.62	14.66	4.81	7.28	1.31	0.32	8000	22.78	13.03	4.59

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Input Return Loss = -S11 (dB)

Gain(Power Gain) = S21 (dB)

Reverse Isolation = -S12 (dB)

Output Return Loss = -S22 (dB)

TEST CONDITIONS: Icc = 40mA, Vd = 4.03V @ Temperature = -45degC

FREQ (MHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		FREQ (MHz)	IP3 Output (dBm)	1dB Comp. Output (dBm)	Noise Figure (dB)
					K	Delta				
50	12.66	17.23	27.43	40.98	1.14	0.59	50	27.99	12.06	3.49
100	12.67	17.26	27.35	40.71	1.14	0.59	100	28.12	11.62	3.46
200	12.64	17.25	26.90	41.23	1.14	0.59	200	28.47	12.16	3.53
400	12.60	17.25	27.44	35.39	1.14	0.58	400	27.88	11.99	3.52
600	12.56	17.23	27.59	32.58	1.15	0.58	600	27.33	11.87	3.50
800	12.50	17.22	28.41	30.53	1.15	0.58	800	27.65	11.65	3.51
1000	12.45	17.21	29.15	28.84	1.15	0.58	1000	27.48	11.55	3.52
1200	12.39	17.18	29.74	27.40	1.15	0.58	1200	27.42	11.59	3.59
1400	12.33	17.15	30.57	26.49	1.15	0.57	1400	27.35	11.94	3.58
1600	12.28	17.13	30.45	25.78	1.16	0.57	1600	28.40	11.79	3.55
1800	12.22	17.09	30.83	25.15	1.16	0.57	1800	28.58	11.86	3.55
2000	12.17	17.07	32.15	24.75	1.16	0.57	2000	28.34	11.94	3.51
2200	12.11	17.04	31.04	24.69	1.16	0.57	2200	28.23	11.61	3.53
2400	12.05	17.00	30.17	24.45	1.16	0.57	2400	28.28	11.12	3.59
2600	11.99	16.98	29.91	24.60	1.16	0.56	2600	28.54	11.02	3.58
2800	11.93	16.92	28.91	24.92	1.16	0.56	2800	28.77	11.25	3.53
3000	11.86	16.87	27.40	25.30	1.17	0.56	3000	28.99	11.50	3.52
3500	11.67	16.78	24.92	26.78	1.17	0.55	3200	28.78	11.48	3.50
4000	11.49	16.63	23.76	28.89	1.17	0.55	3400	28.79	11.50	3.49
4500	11.32	16.46	23.30	31.31	1.17	0.55	3600	28.78	11.62	3.49
5000	11.09	16.32	24.52	29.54	1.18	0.55	3800	28.79	11.51	3.54
5500	10.85	16.15	26.18	24.46	1.18	0.54	4000	29.08	11.41	3.54
6000	10.65	15.97	25.89	21.38	1.18	0.54	4200	29.04	11.41	3.53
6500	10.33	15.79	25.39	18.37	1.19	0.54	4400	29.00	11.45	3.51
7000	10.17	15.67	24.97	16.48	1.19	0.54	4600	28.97	11.83	3.49
7500	10.06	15.55	23.99	14.84	1.18	0.54	4800	28.97	12.35	3.61
8000	9.83	15.38	20.58	12.97	1.17	0.55	5000	28.85	12.43	3.65
8500	9.63	15.26	17.41	11.35	1.17	0.56	5200	28.78	12.59	3.58
9000	9.39	15.15	14.93	10.04	1.16	0.57	5400	28.60	12.72	3.57
10000	8.66	15.03	11.90	7.91	1.16	0.58	5600	28.53	12.43	3.49
11000	7.56	14.90	9.54	6.34	1.16	0.59	5800	28.24	12.86	3.53
12000	6.06	15.07	6.81	5.05	1.18	0.60	6000	28.27	12.95	3.54
13000	4.57	15.13	5.36	4.33	1.19	0.60	6200	28.47	13.17	3.61
14000	3.31	15.49	4.45	3.67	1.15	0.59	6400	28.57	13.28	3.67
15000	2.25	15.87	3.88	3.47	1.13	0.57	6600	28.60	13.62	3.70
16000	1.91	15.51	3.86	3.86	1.06	0.52	6800	27.93	13.73	3.78
17000	2.29	14.92	4.38	5.72	1.09	0.37	7000	27.18	13.76	3.78
18000	2.93	13.62	5.51	9.19	1.15	0.27	7200	26.96	13.45	3.75
19000	3.17	12.82	5.82	9.62	1.14	0.35	7600	26.63	13.32	3.86
20000	2.54	14.04	4.26	6.96	1.09	0.39	8000	25.62	13.34	3.91

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Input Return Loss = -S11 (dB)

Gain(Power Gain) = S21 (dB)

Reverse Isolation = -S12 (dB)

Output Return Loss = -S22 (dB)

TEST CONDITIONS: Icc = 32mA, Vd = 3.93V @ Temperature = -45degC

FREQ (MHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		FREQ (MHz)	IP3 Output (dBm)	1dB Comp. Output (dBm)	Noise Figure (dB)
					K	Delta				
50	12.39	17.13	24.37	38.43	1.15	0.58	50	23.10	8.23	3.44
100	12.40	17.06	24.22	38.00	1.15	0.59	100	23.16	7.87	3.43
200	12.37	17.08	23.98	36.93	1.15	0.58	200	23.40	8.44	3.49
400	12.33	17.07	24.33	37.44	1.15	0.58	400	23.00	8.21	3.51
600	12.29	17.05	24.49	34.71	1.15	0.58	600	22.54	8.10	3.48
800	12.23	17.04	25.11	33.46	1.15	0.58	800	22.71	7.91	3.51
1000	12.18	17.02	25.75	31.71	1.16	0.57	1000	22.55	7.72	3.52
1200	12.14	17.00	26.26	29.92	1.16	0.57	1200	22.45	7.83	3.57
1400	12.08	16.97	26.80	28.81	1.16	0.57	1400	22.38	8.29	3.52
1600	12.03	16.95	26.82	27.80	1.16	0.57	1600	23.07	8.06	3.50
1800	11.98	16.92	27.33	26.87	1.16	0.57	1800	23.35	8.21	3.53
2000	11.93	16.88	27.92	26.38	1.16	0.57	2000	23.08	8.27	3.47
2200	11.87	16.85	27.07	26.01	1.16	0.56	2200	23.08	7.92	3.53
2400	11.82	16.81	26.53	25.42	1.16	0.56	2400	23.05	7.40	3.57
2600	11.77	16.80	26.26	25.46	1.17	0.56	2600	23.34	7.33	3.56
2800	11.70	16.73	25.46	25.55	1.17	0.56	2800	23.61	7.65	3.49
3000	11.64	16.69	24.35	25.65	1.17	0.56	3000	23.71	7.88	3.51
3500	11.47	16.60	22.48	26.57	1.17	0.55	3200	23.46	7.96	3.49
4000	11.30	16.46	21.58	28.49	1.17	0.55	3400	23.39	7.97	3.47
4500	11.15	16.29	21.23	32.07	1.17	0.55	3600	23.65	8.06	3.49
5000	10.93	16.15	22.13	33.51	1.18	0.55	3800	23.85	7.96	3.51
5500	10.71	15.97	23.33	26.54	1.18	0.54	4000	24.17	7.88	3.48
6000	10.52	15.80	23.29	22.62	1.18	0.54	4200	24.17	7.78	3.52
6500	10.19	15.63	23.16	19.07	1.19	0.54	4400	24.20	7.93	3.43
7000	10.05	15.50	22.99	16.98	1.18	0.54	4600	24.37	8.31	3.46
7500	9.96	15.40	22.61	15.24	1.18	0.54	4800	24.67	8.93	3.56
8000	9.74	15.24	20.27	13.25	1.17	0.55	5000	24.70	9.06	3.63
8500	9.53	15.13	17.34	11.57	1.16	0.56	5200	24.32	9.15	3.55
9000	9.30	15.04	14.90	10.23	1.16	0.57	5400	23.89	9.26	3.53
10000	8.57	14.95	11.85	8.09	1.16	0.58	5600	24.14	8.94	3.45
11000	7.46	14.85	9.55	6.52	1.17	0.58	5800	24.49	9.39	3.47
12000	5.98	15.04	6.84	5.25	1.19	0.59	6000	25.19	9.48	3.49
13000	4.49	15.14	5.38	4.56	1.20	0.59	6200	25.83	10.15	3.58
14000	3.24	15.52	4.46	3.90	1.16	0.57	6400	25.69	10.40	3.62
15000	2.16	15.91	3.90	3.74	1.14	0.55	6600	25.25	11.17	3.67
16000	1.74	15.58	3.86	4.19	1.08	0.48	6800	25.31	11.43	3.67
17000	1.99	15.04	4.30	6.09	1.11	0.33	7000	25.31	11.63	3.72
18000	2.57	13.84	5.31	9.49	1.18	0.23	7200	25.49	11.07	3.68
19000	2.85	13.01	5.60	10.01	1.16	0.31	7600	25.44	11.25	3.79
20000	2.25	14.21	4.14	7.32	1.10	0.36	8000	24.40	11.79	3.81

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*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 = 48mA, Vd = 4.15V @ Temperature = -45degC

FREQ (MHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		FREQ (MHz)	IP3 Output (dBm)	1dB Comp. Output (dBm)	Noise Figure (dB)
					K	Delta				
50	12.81	17.33	30.02	33.92	1.14	0.59	50	31.55	14.53	3.50
100	12.80	17.36	29.46	34.12	1.14	0.59	100	31.65	14.23	3.53
200	12.78	17.35	29.06	34.39	1.14	0.59	200	32.12	14.51	3.55
400	12.74	17.36	29.61	31.49	1.14	0.59	400	31.20	14.44	3.60
600	12.69	17.34	29.73	29.89	1.14	0.58	600	30.72	14.30	3.52
800	12.63	17.32	30.83	28.32	1.15	0.58	800	31.04	14.11	3.57
1000	12.57	17.31	31.54	27.04	1.15	0.58	1000	30.90	13.95	3.55
1200	12.52	17.28	31.97	25.89	1.15	0.58	1200	30.84	14.03	3.60
1400	12.46	17.26	32.97	25.11	1.15	0.58	1400	30.95	14.21	3.59
1600	12.40	17.23	32.57	24.57	1.15	0.57	1600	32.63	14.12	3.55
1800	12.34	17.20	32.81	24.09	1.16	0.57	1800	32.01	14.19	3.58
2000	12.29	17.18	34.69	23.77	1.16	0.57	2000	31.82	14.27	3.52
2200	12.22	17.14	33.82	23.79	1.16	0.57	2200	31.90	14.00	3.55
2400	12.16	17.10	32.59	23.70	1.16	0.57	2400	32.01	13.58	3.59
2600	12.10	17.08	32.47	23.91	1.16	0.56	2600	31.95	13.48	3.58
2800	12.04	17.03	31.60	24.28	1.16	0.56	2800	32.02	13.68	3.56
3000	11.97	16.97	29.79	24.75	1.17	0.56	3000	32.24	13.81	3.52
3500	11.77	16.88	26.62	26.41	1.17	0.55	3200	32.13	13.78	3.50
4000	11.59	16.73	25.26	28.40	1.18	0.55	3400	32.17	13.80	3.51
4500	11.40	16.56	24.76	30.11	1.18	0.55	3600	31.98	13.85	3.55
5000	11.17	16.44	26.29	28.05	1.18	0.54	3800	31.48	13.84	3.62
5500	10.92	16.25	28.42	23.69	1.19	0.54	4000	31.57	13.79	3.61
6000	10.71	16.07	27.79	20.91	1.19	0.54	4200	31.39	13.75	3.60
6500	10.38	15.88	26.86	18.06	1.19	0.53	4400	31.57	13.80	3.53
7000	10.21	15.76	26.19	16.27	1.19	0.53	4600	31.40	14.07	3.53
7500	10.10	15.64	24.62	14.71	1.18	0.54	4800	30.89	14.52	3.66
8000	9.87	15.46	20.62	12.88	1.18	0.55	5000	30.71	14.62	3.70
8500	9.66	15.34	17.40	11.27	1.17	0.56	5200	30.80	14.73	3.66
9000	9.43	15.22	14.95	9.96	1.16	0.57	5400	30.87	14.75	3.63
10000	8.70	15.09	11.93	7.84	1.16	0.58	5600	30.42	14.60	3.53
11000	7.60	14.93	9.53	6.25	1.16	0.59	5800	29.74	14.81	3.59
12000	6.10	15.09	6.81	4.94	1.18	0.61	6000	29.21	14.81	3.61
13000	4.61	15.14	5.38	4.19	1.18	0.61	6200	29.13	14.79	3.67
14000	3.33	15.51	4.45	3.52	1.15	0.61	6400	29.02	14.72	3.76
15000	2.29	15.87	3.87	3.29	1.12	0.59	6600	29.51	14.84	3.80
16000	1.99	15.51	3.87	3.64	1.06	0.54	6800	28.94	14.83	3.81
17000	2.47	14.87	4.45	5.40	1.08	0.40	7000	28.37	14.77	3.85
18000	3.15	13.47	5.66	8.83	1.13	0.31	7200	27.64	14.53	3.82
19000	3.35	12.70	5.95	9.24	1.12	0.37	7600	27.09	14.24	3.94
20000	2.72	13.94	4.38	6.67	1.08	0.42	8000	26.18	14.06	3.97

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*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 = 40mA, Vd = 3.72V @ Temperature = +85degC

FREQ (MHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		FREQ (MHz)	IP3 Output (dBm)	1dB Comp. Output (dBm)	Noise Figure (dB)
					K	Delta				
50	12.44	17.15	26.89	46.64	1.15	0.58	50	27.18	12.25	4.59
100	12.44	17.17	27.33	42.47	1.15	0.58	100	27.30	12.02	4.62
200	12.40	17.16	28.05	39.60	1.15	0.58	200	27.70	12.52	4.61
400	12.34	17.18	27.38	36.92	1.16	0.57	400	26.89	12.32	4.66
600	12.29	17.17	27.59	33.65	1.16	0.57	600	26.31	12.16	4.60
800	12.22	17.16	27.99	31.47	1.16	0.57	800	26.49	11.92	4.69
1000	12.16	17.14	28.43	29.84	1.17	0.56	1000	26.33	11.74	4.65
1200	12.10	17.14	28.57	28.11	1.17	0.56	1200	26.23	11.95	4.71
1400	12.04	17.11	28.72	27.44	1.17	0.56	1400	26.15	12.15	4.75
1600	11.97	17.10	28.95	26.39	1.18	0.55	1600	27.38	12.02	4.71
1800	11.90	17.08	28.73	25.70	1.18	0.55	1800	27.31	12.09	4.76
2000	11.85	17.04	28.70	25.34	1.18	0.55	2000	27.07	12.15	4.70
2200	11.77	17.03	28.44	24.65	1.18	0.55	2200	26.96	11.85	4.73
2400	11.71	16.98	27.75	24.37	1.18	0.54	2400	27.06	11.36	4.74
2600	11.64	16.97	27.13	24.32	1.19	0.54	2600	27.11	11.30	4.77
2800	11.57	16.93	26.43	23.99	1.19	0.54	2800	27.22	11.52	4.73
3000	11.50	16.88	25.51	24.33	1.19	0.54	3000	27.35	11.73	4.76
3500	11.31	16.79	23.08	25.30	1.20	0.53	3200	27.20	11.72	4.71
4000	11.10	16.67	21.19	28.49	1.20	0.53	3400	27.09	11.73	4.69
4500	10.90	16.51	20.18	34.55	1.21	0.52	3600	26.78	11.85	4.69
5000	10.68	16.35	20.43	37.80	1.21	0.52	3800	26.51	11.76	4.75
5500	10.42	16.18	22.62	25.89	1.22	0.51	4000	26.55	11.63	4.75
6000	10.15	16.04	24.71	20.56	1.23	0.51	4200	26.49	11.60	4.80
6500	9.88	15.91	23.54	17.48	1.23	0.50	4400	26.24	11.69	4.74
7000	9.63	15.75	20.82	15.55	1.23	0.50	4600	25.88	12.07	4.77
7500	9.49	15.67	19.52	14.62	1.23	0.50	4800	25.52	12.53	4.82
8000	9.24	15.50	17.98	13.45	1.23	0.50	5000	25.24	12.65	4.83
8500	9.00	15.40	16.64	12.07	1.23	0.51	5200	25.22	12.70	4.79
9000	8.66	15.28	14.79	10.31	1.22	0.52	5400	25.11	12.61	4.78
10000	7.62	15.39	10.65	7.54	1.24	0.53	5600	24.57	12.33	4.81
11000	6.21	15.57	8.09	6.18	1.29	0.52	5800	24.11	12.55	4.79
12000	4.87	15.40	6.88	5.67	1.33	0.51	6000	23.55	12.57	4.82
13000	3.61	15.32	5.77	5.24	1.32	0.50	6200	23.38	12.58	4.89
14000	2.14	15.59	4.83	4.53	1.32	0.49	6400	23.28	12.57	4.96
15000	0.89	15.98	4.21	4.51	1.34	0.45	6600	23.12	12.73	4.95
16000	0.56	15.82	4.60	5.31	1.39	0.35	6800	22.77	12.73	4.99
17000	0.73	15.01	5.67	7.08	1.53	0.24	7000	22.24	12.65	4.98
18000	1.03	13.98	6.14	9.28	1.52	0.21	7200	21.79	12.29	5.01
19000	0.79	13.98	5.23	9.29	1.47	0.25	7600	21.40	12.00	5.03
20000	0.33	15.06	4.64	7.78	1.52	0.26	8000	20.68	11.73	5.10

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*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 = 32mA, Vd = 3.62V @ Temperature = +85degC

FREQ (MHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		FREQ (MHz)	IP3 Output (dBm)	1dB Comp. Output (dBm)	Noise Figure (dB)
					K	Delta				
50	12.11	16.90	23.40	32.92	1.15	0.58	50	22.79	8.82	4.54
100	12.10	16.92	23.81	34.65	1.16	0.58	100	22.88	8.47	4.58
200	12.08	16.95	24.20	35.82	1.16	0.57	200	23.20	9.14	4.64
400	12.02	16.94	23.84	34.23	1.16	0.57	400	22.65	8.81	4.62
600	11.96	16.95	24.01	33.55	1.17	0.56	600	22.13	8.72	4.62
800	11.91	16.93	24.23	32.68	1.17	0.56	800	22.30	8.45	4.64
1000	11.84	16.92	24.60	31.78	1.17	0.56	1000	22.14	8.26	4.67
1200	11.78	16.91	24.81	29.79	1.18	0.55	1200	22.01	8.40	4.70
1400	11.73	16.89	24.90	28.96	1.18	0.55	1400	21.92	8.80	4.74
1600	11.67	16.88	25.10	27.92	1.18	0.55	1600	22.70	8.66	4.70
1800	11.60	16.86	24.94	26.74	1.18	0.55	1800	22.98	8.74	4.72
2000	11.56	16.83	24.90	26.35	1.18	0.55	2000	22.70	8.78	4.71
2200	11.49	16.80	24.68	25.44	1.19	0.54	2200	22.71	8.41	4.67
2400	11.43	16.78	24.24	24.80	1.19	0.54	2400	22.85	7.82	4.70
2600	11.36	16.76	23.82	24.57	1.19	0.54	2600	23.13	7.75	4.71
2800	11.29	16.72	23.27	23.99	1.19	0.53	2800	23.35	8.15	4.70
3000	11.24	16.67	22.56	24.09	1.19	0.53	3000	23.48	8.45	4.69
3500	11.05	16.58	20.78	24.41	1.20	0.53	3200	23.27	8.43	4.70
4000	10.86	16.46	19.28	26.50	1.20	0.53	3400	23.24	8.44	4.67
4500	10.68	16.31	18.46	30.31	1.20	0.52	3600	23.40	8.61	4.63
5000	10.48	16.15	18.66	49.41	1.21	0.52	3800	23.52	8.46	4.70
5500	10.24	15.98	20.41	28.81	1.21	0.51	4000	23.91	8.28	4.74
6000	9.98	15.85	22.21	21.89	1.22	0.51	4200	23.86	8.31	4.73
6500	9.73	15.71	21.78	18.34	1.23	0.50	4400	23.94	8.45	4.74
7000	9.48	15.55	19.76	16.18	1.23	0.50	4600	23.92	8.90	4.68
7500	9.36	15.51	18.58	15.12	1.23	0.50	4800	23.97	9.62	4.77
8000	9.11	15.34	17.30	13.88	1.22	0.50	5000	24.00	9.72	4.76
8500	8.86	15.26	16.15	12.42	1.22	0.50	5200	23.84	9.76	4.72
9000	8.53	15.15	14.58	10.59	1.22	0.51	5400	23.64	9.85	4.73
10000	7.49	15.31	10.62	7.78	1.25	0.52	5600	23.57	9.39	4.71
11000	6.08	15.52	8.11	6.44	1.30	0.51	5800	23.49	9.83	4.74
12000	4.75	15.39	6.89	5.97	1.35	0.50	6000	23.50	10.02	4.70
13000	3.48	15.35	5.76	5.54	1.35	0.48	6200	23.82	10.42	4.78
14000	2.02	15.62	4.84	4.80	1.35	0.47	6400	23.87	10.59	4.86
15000	0.73	16.01	4.22	4.79	1.37	0.43	6600	23.59	11.05	4.88
16000	0.31	15.90	4.56	5.58	1.43	0.32	6800	23.01	11.21	4.82
17000	0.40	15.15	5.55	7.27	1.58	0.21	7000	22.50	11.22	4.85
18000	0.66	14.18	5.97	9.38	1.58	0.18	7200	22.15	10.70	4.89
19000	0.46	14.19	5.10	9.45	1.52	0.22	7600	21.72	10.75	4.97
20000	0.00	15.24	4.55	7.92	1.58	0.24	8000	20.77	10.80	4.97

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*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 = 48mA, Vd = 3.83V @ Temperature = +85degC

FREQ (MHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		FREQ (MHz)	IP3 Output (dBm)	1dB Comp. Output (dBm)	Noise Figure (dB)
					K	Delta				
50	12.62	17.34	29.69	34.54	1.15	0.58	50	30.25	14.04	4.57
100	12.61	17.25	30.29	33.60	1.14	0.59	100	30.41	13.98	4.63
200	12.58	17.30	31.14	32.39	1.15	0.58	200	30.89	14.02	4.62
400	12.52	17.31	30.32	31.94	1.15	0.58	400	29.93	14.06	4.66
600	12.46	17.29	30.38	30.17	1.16	0.57	600	29.19	14.07	4.64
800	12.39	17.28	30.92	28.82	1.16	0.57	800	29.29	13.93	4.72
1000	12.32	17.27	31.31	27.71	1.16	0.57	1000	29.12	13.81	4.68
1200	12.26	17.26	31.20	26.40	1.17	0.56	1200	29.15	13.80	4.74
1400	12.20	17.24	31.36	25.89	1.17	0.56	1400	28.97	13.87	4.75
1600	12.13	17.22	31.48	25.08	1.17	0.56	1600	30.51	13.75	4.73
1800	12.06	17.20	31.11	24.65	1.18	0.55	1800	29.66	13.81	4.81
2000	12.00	17.16	31.16	24.42	1.18	0.55	2000	29.56	13.90	4.73
2200	11.93	17.15	30.91	23.92	1.18	0.55	2200	29.39	13.76	4.75
2400	11.86	17.10	30.00	23.85	1.18	0.55	2400	29.35	13.43	4.76
2600	11.79	17.09	29.29	23.89	1.19	0.54	2600	29.10	13.39	4.76
2800	11.72	17.04	28.50	23.74	1.19	0.54	2800	29.01	13.43	4.76
3000	11.64	17.00	27.39	24.22	1.19	0.54	3000	28.92	13.56	4.78
3500	11.44	16.89	24.49	25.61	1.20	0.53	3200	28.77	13.52	4.76
4000	11.22	16.77	22.28	29.52	1.20	0.53	3400	28.47	13.52	4.69
4500	11.01	16.60	21.14	36.61	1.21	0.52	3600	27.94	13.57	4.75
5000	10.79	16.46	21.42	33.23	1.21	0.52	3800	27.48	13.61	4.78
5500	10.52	16.28	23.90	24.62	1.22	0.51	4000	27.36	13.56	4.79
6000	10.23	16.14	26.17	19.92	1.23	0.51	4200	27.21	13.53	4.82
6500	9.95	16.00	24.39	17.11	1.23	0.50	4400	26.93	13.55	4.77
7000	9.69	15.83	21.26	15.29	1.23	0.50	4600	26.50	13.84	4.83
7500	9.55	15.76	19.89	14.41	1.23	0.50	4800	26.13	14.14	4.86
8000	9.29	15.58	18.26	13.30	1.23	0.50	5000	25.79	14.13	4.92
8500	9.04	15.47	16.84	11.97	1.23	0.51	5200	25.58	14.05	4.83
9000	8.70	15.34	14.87	10.24	1.22	0.52	5400	25.53	13.87	4.88
10000	7.66	15.44	10.65	7.50	1.24	0.53	5600	25.10	13.72	4.86
11000	6.25	15.60	8.08	6.14	1.29	0.53	5800	24.44	13.81	4.85
12000	4.91	15.39	6.87	5.61	1.32	0.52	6000	23.76	13.69	4.90
13000	3.65	15.32	5.77	5.17	1.32	0.51	6200	23.48	13.56	4.94
14000	2.17	15.58	4.83	4.44	1.32	0.50	6400	23.30	13.34	5.00
15000	0.94	15.95	4.20	4.40	1.33	0.46	6600	23.22	13.40	5.04
16000	0.62	15.82	4.61	5.19	1.39	0.36	6800	22.93	13.35	5.02
17000	0.84	14.94	5.72	6.96	1.51	0.25	7000	22.35	13.24	5.06
18000	1.13	13.90	6.22	9.15	1.50	0.23	7200	21.90	12.88	5.09
19000	0.89	13.90	5.30	9.16	1.45	0.26	7600	21.46	12.49	5.17
20000	0.43	14.98	4.70	7.65	1.51	0.27	8000	20.70	12.13	5.19

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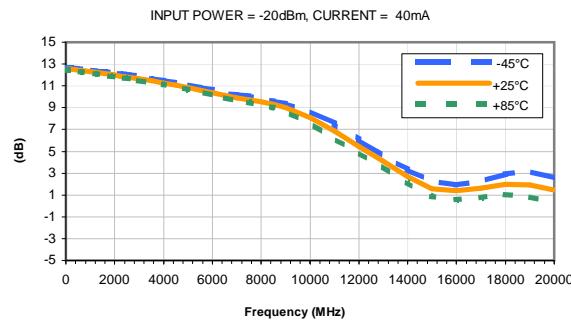


MMIC Amplifier

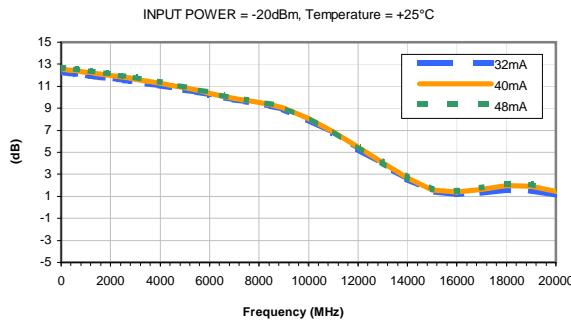
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Typical Performance Curves

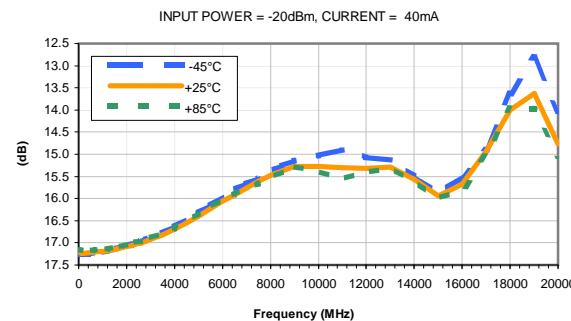
GAIN vs. TEMPERATURE



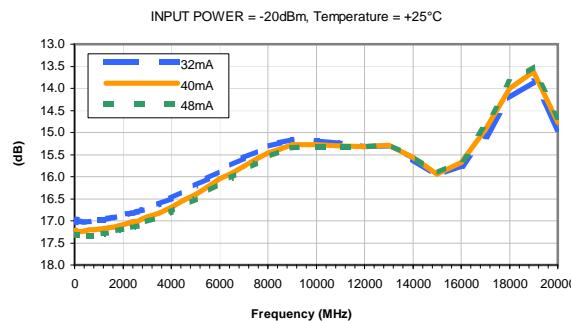
GAIN vs. CURRENT



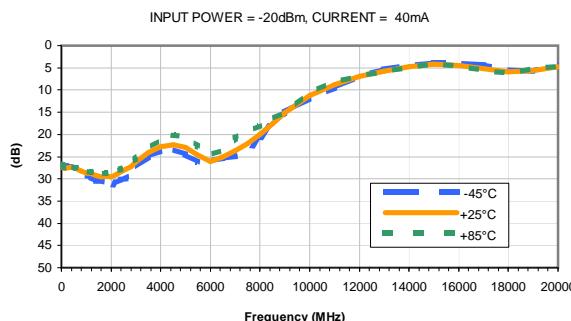
ISOLATION vs. TEMPERATURE



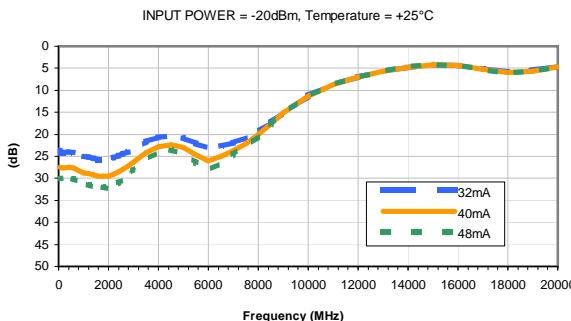
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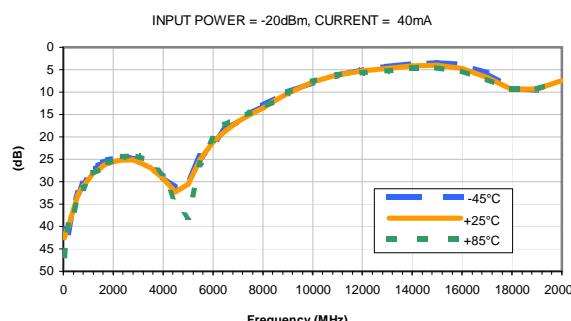
INPUT RETURN LOSS vs. TEMPERATURE



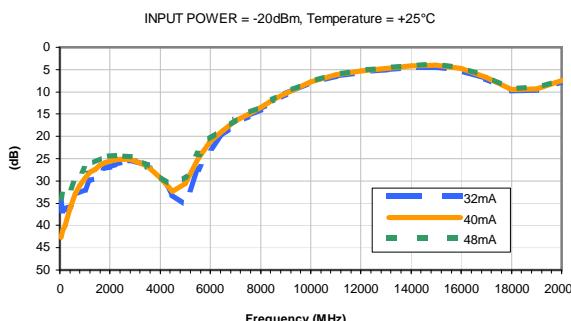
INPUT RETURN LOSS vs. CURRENT



OUTPUT RETURN LOSS vs. TEMPERATURE



OUTPUT RETURN LOSS vs. CURRENT



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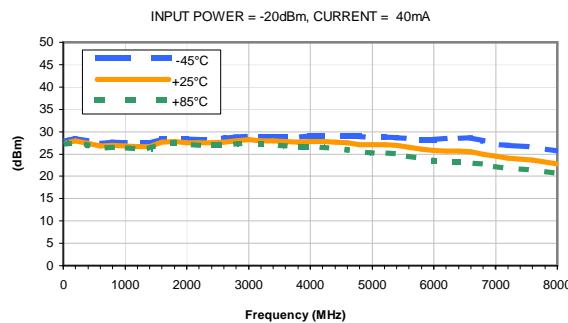
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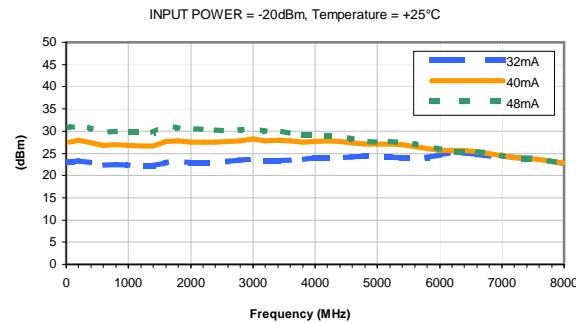
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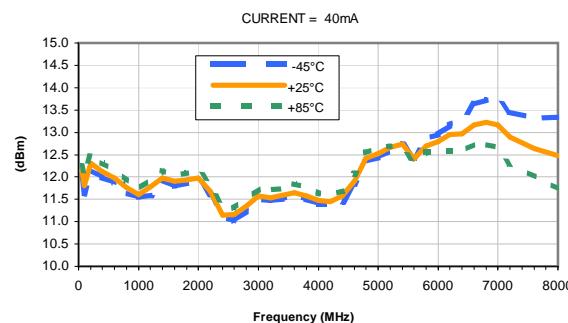
OUTPUT IP3 vs. TEMPERATURE



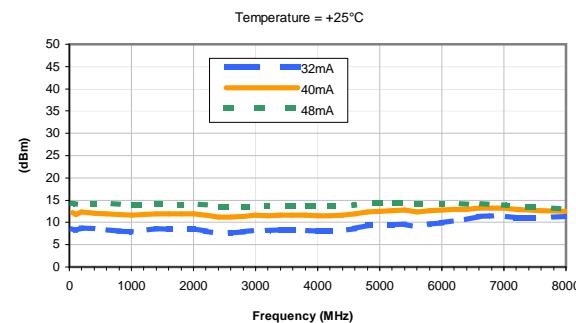
OUTPUT IP-3 vs. CURRENT



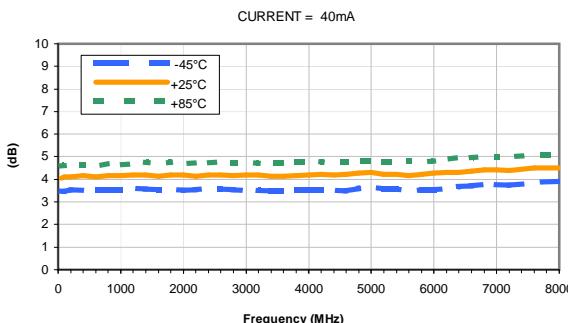
OUTPUT POWER at 1dB Compression vs. TEMPERATURE



OUTPUT POWER at 1dB Compression vs. CURRENT



Noise Figure vs. TEMPERATURE



Noise Figure vs. CURRENT

