

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 = 22mA, Vd = 4.02V @Temperature = +25degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP3 Output	1dB Comp. Output	Noise Figure
					K	Delta			
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Delta	(dBm)	(dBm)	(dB)
50	13.93	18.71	36.62	28.19	1.15	0.58	21.65	8.23	3.20
100	13.91	18.65	39.15	28.50	1.15	0.58	21.64	8.02	3.29
150	13.85	18.73	37.15	28.79	1.16	0.57	21.94	8.22	3.25
200	13.83	18.69	38.01	28.53	1.16	0.57	21.71	8.27	3.16
250	13.79	18.67	35.48	28.48	1.16	0.57	21.01	8.12	3.18
300	13.76	18.68	34.74	28.41	1.16	0.57	21.93	8.25	3.34
350	13.72	18.65	33.81	28.36	1.16	0.57	21.54	8.08	3.31
400	13.67	18.64	33.20	28.40	1.17	0.56	21.31	8.32	3.24
450	13.62	18.61	32.32	28.12	1.17	0.56	20.96	8.06	3.23
500	13.56	18.56	31.49	27.90	1.17	0.56	21.24	8.25	3.31
550	13.51	18.54	30.65	27.76	1.17	0.56	21.09	8.06	3.31
600	13.45	18.50	30.09	27.29	1.17	0.56	21.10	8.02	3.25
650	13.41	18.47	29.37	27.02	1.17	0.56	20.89	8.16	3.22
700	13.35	18.45	28.83	26.58	1.17	0.55	21.19	7.93	3.32
750	13.27	18.42	28.25	26.30	1.18	0.55	21.24	8.15	3.31
800	13.20	18.37	27.81	25.78	1.18	0.55	21.19	7.77	3.21
850	13.15	18.33	27.40	25.37	1.18	0.55	21.06	8.09	3.18
900	13.06	18.30	26.86	24.95	1.18	0.55	21.08	7.93	3.27
940	13.01	18.27	26.29	24.59	1.18	0.54	21.24	7.69	3.35
1000	12.92	18.20	25.81	24.06	1.18	0.54	21.09	7.78	3.27
1050	12.84	18.18	25.43	23.58	1.19	0.54	21.10	7.80	3.26
1100	12.76	18.13	24.93	23.13	1.19	0.54	20.89	7.99	3.34
1150	12.68	18.06	24.51	22.68	1.19	0.54	20.95	7.74	3.30
1200	12.60	18.03	24.11	22.29	1.19	0.53	20.82	7.93	3.34
1250	12.51	17.98	23.75	21.85	1.19	0.53	20.92	7.75	3.31
1300	12.43	17.93	23.40	21.50	1.20	0.53	20.82	7.79	3.34
1350	12.34	17.88	23.00	21.16	1.20	0.53	20.70	7.72	3.39
1400	12.26	17.83	22.59	20.78	1.20	0.53	20.57	7.78	3.31
1450	12.18	17.80	22.24	20.39	1.20	0.52	20.42	7.80	3.33
1500	12.07	17.73	21.90	20.05	1.21	0.52	20.44	7.82	3.31
1550	12.00	17.69	21.51	19.74	1.21	0.52	20.72	7.81	3.32
1600	11.88	17.63	21.29	19.45	1.21	0.52	20.76	7.99	3.34
1650	11.79	17.58	21.03	19.17	1.21	0.52	20.77	7.73	3.27
1700	11.70	17.53	20.65	18.92	1.21	0.51	20.67	7.92	3.23
1750	11.61	17.49	20.36	18.61	1.22	0.51	20.55	7.69	3.35
1800	11.50	17.43	20.09	18.33	1.22	0.51	20.57	7.94	3.43
1850	11.40	17.36	19.84	18.09	1.22	0.51	20.12	7.54	3.40
1900	11.31	17.33	19.56	17.86	1.23	0.50	19.76	7.76	3.40
1950	11.21	17.27	19.29	17.65	1.23	0.50	19.90	7.67	3.37
2000	11.12	17.21	19.02	17.42	1.23	0.50	19.79	7.62	3.36

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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 = 16mA, Vd = 3.94V @Temperature = +25degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP3 Output	1dB Comp. Output	Noise Figure
					K	Delta			
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Delta	(dBm)	(dBm)	(dB)
50	13.27	18.20	29.19	21.05	1.16	0.57	16.18	3.28	3.25
100	13.26	18.23	28.55	21.27	1.16	0.57	16.16	2.98	3.28
150	13.18	18.23	29.10	21.34	1.17	0.56	16.44	3.11	3.29
200	13.16	18.22	28.59	21.41	1.17	0.56	16.25	3.15	3.22
250	13.14	18.23	29.56	21.53	1.17	0.56	15.65	3.07	3.23
300	13.11	18.22	28.85	21.67	1.17	0.56	16.44	3.15	3.35
350	13.06	18.19	28.46	21.92	1.17	0.56	16.07	2.89	3.33
400	13.03	18.13	28.83	22.00	1.17	0.56	15.95	3.24	3.32
450	12.98	18.14	28.93	22.05	1.18	0.55	15.63	3.00	3.28
500	12.94	18.12	28.44	22.33	1.18	0.55	15.94	3.12	3.31
550	12.87	18.07	28.38	22.48	1.18	0.55	15.79	2.93	3.31
600	12.82	18.02	28.30	22.56	1.18	0.55	15.85	2.92	3.30
650	12.80	17.99	28.09	22.84	1.18	0.55	15.64	3.13	3.28
700	12.75	17.98	27.84	23.04	1.18	0.55	15.94	2.91	3.31
750	12.67	17.93	27.89	23.11	1.18	0.54	16.01	3.17	3.30
800	12.62	17.92	27.53	23.24	1.18	0.54	15.99	2.71	3.25
850	12.56	17.85	27.09	23.52	1.18	0.54	15.89	3.09	3.22
900	12.48	17.80	26.88	23.51	1.19	0.54	15.92	2.90	3.27
940	12.43	17.79	26.71	23.51	1.19	0.54	16.17	2.77	3.31
1000	12.35	17.73	26.17	23.54	1.19	0.54	16.02	2.90	3.30
1050	12.30	17.69	25.86	23.58	1.19	0.53	16.17	2.89	3.31
1100	12.21	17.64	25.59	23.44	1.19	0.53	15.92	3.19	3.35
1150	12.13	17.59	25.16	23.26	1.19	0.53	16.13	2.82	3.27
1200	12.07	17.54	24.80	23.17	1.19	0.53	16.01	3.11	3.35
1250	12.00	17.51	24.41	22.97	1.20	0.53	16.20	2.92	3.35
1300	11.91	17.44	24.11	22.84	1.20	0.52	16.18	2.91	3.33
1350	11.83	17.39	23.72	22.64	1.20	0.52	16.18	2.91	3.36
1400	11.76	17.35	23.26	22.34	1.20	0.52	16.13	2.86	3.35
1450	11.68	17.31	22.92	22.12	1.20	0.52	16.07	2.95	3.34
1500	11.58	17.25	22.54	21.84	1.20	0.52	16.17	3.05	3.30
1550	11.51	17.22	22.15	21.54	1.21	0.51	16.50	2.96	3.29
1600	11.40	17.15	21.91	21.34	1.21	0.51	16.59	3.43	3.34
1650	11.31	17.10	21.60	21.06	1.21	0.51	16.73	3.18	3.31
1700	11.25	17.05	21.21	20.80	1.21	0.51	16.61	3.22	3.25
1750	11.16	17.01	20.92	20.48	1.21	0.51	16.83	3.19	3.33
1800	11.05	16.95	20.60	20.19	1.22	0.50	16.88	3.45	3.42
1850	10.96	16.90	20.34	19.96	1.22	0.50	16.85	3.00	3.43
1900	10.88	16.86	20.04	19.70	1.22	0.50	16.30	3.29	3.40
1950	10.78	16.80	19.74	19.47	1.22	0.50	16.79	3.33	3.35
2000	10.70	16.74	19.44	19.14	1.23	0.50	16.54	3.28	3.31

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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 = 28mA, Vd = 4.09V @Temperature = +25degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP3 Output	1dB Comp. Output	Noise Figure
					K	Delta			
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Delta	(dBm)	(dBm)	(dB)
50	14.26	18.98	28.02	38.30	1.15	0.58	25.44	10.09	3.21
100	14.24	18.93	28.80	38.54	1.15	0.58	25.44	10.10	3.34
150	14.18	18.91	28.41	37.54	1.15	0.58	25.84	10.20	3.28
200	14.16	18.97	28.52	35.69	1.16	0.57	25.49	10.27	3.15
250	14.12	18.92	27.74	34.22	1.15	0.58	24.66	10.26	3.20
300	14.09	18.93	27.85	32.99	1.16	0.57	25.73	10.37	3.41
350	14.04	18.91	27.68	31.81	1.16	0.57	25.24	10.30	3.36
400	13.99	18.90	27.22	30.93	1.16	0.57	24.89	10.45	3.24
450	13.94	18.85	27.04	29.90	1.16	0.57	24.55	10.40	3.26
500	13.88	18.85	26.78	29.03	1.17	0.56	24.73	10.51	3.35
550	13.83	18.82	26.34	28.13	1.17	0.56	24.58	10.42	3.35
600	13.77	18.80	26.06	27.43	1.17	0.56	24.52	10.40	3.25
650	13.72	18.73	25.59	26.74	1.17	0.56	24.27	10.54	3.21
700	13.65	18.70	25.42	25.92	1.17	0.56	24.53	10.38	3.34
750	13.58	18.68	25.02	25.45	1.17	0.56	24.54	10.54	3.35
800	13.51	18.64	24.81	24.79	1.17	0.55	24.42	10.16	3.23
850	13.44	18.60	24.53	24.15	1.18	0.55	24.26	10.42	3.17
900	13.35	18.56	24.16	23.67	1.18	0.55	24.28	10.31	3.32
940	13.31	18.53	23.81	23.29	1.18	0.55	24.31	10.10	3.35
1000	13.21	18.47	23.57	22.67	1.18	0.55	24.10	10.20	3.26
1050	13.12	18.43	23.26	22.18	1.18	0.54	23.95	10.24	3.25
1100	13.03	18.38	22.85	21.76	1.19	0.54	23.74	10.38	3.36
1150	12.96	18.33	22.64	21.32	1.19	0.54	23.67	10.08	3.33
1200	12.87	18.29	22.41	20.91	1.19	0.54	23.51	10.23	3.35
1250	12.78	18.25	22.08	20.51	1.19	0.54	23.49	10.10	3.32
1300	12.70	18.19	21.80	20.20	1.20	0.53	23.33	10.08	3.34
1350	12.60	18.15	21.53	19.84	1.20	0.53	23.06	10.04	3.43
1400	12.52	18.09	21.22	19.47	1.20	0.53	22.88	10.06	3.34
1450	12.42	18.04	20.94	19.15	1.20	0.53	22.72	10.04	3.33
1500	12.32	18.00	20.69	18.87	1.21	0.53	22.66	9.98	3.32
1550	12.23	17.93	20.40	18.56	1.21	0.52	22.87	9.98	3.37
1600	12.13	17.89	20.24	18.35	1.21	0.52	22.90	10.06	3.37
1650	12.03	17.85	20.02	18.07	1.21	0.52	22.78	9.81	3.27
1700	11.94	17.78	19.72	17.80	1.22	0.52	22.66	9.81	3.27
1750	11.84	17.72	19.49	17.55	1.22	0.52	22.34	9.67	3.42
1800	11.74	17.68	19.27	17.30	1.22	0.51	22.37	9.71	3.48
1850	11.64	17.63	19.04	17.09	1.22	0.51	21.72	9.34	3.43
1900	11.54	17.57	18.81	16.86	1.23	0.51	21.44	9.49	3.43
1950	11.44	17.51	18.60	16.68	1.23	0.51	21.39	9.31	3.43
2000	11.34	17.46	18.37	16.47	1.23	0.51	21.39	9.22	3.40

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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 = 22mA, Vd = 4.25V @Temperature = -45degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP3 Output	1dB Comp. Output	Noise Figure
					K	Delta			
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Delta	(dBm)	(dBm)	(dB)
50	14.22	18.87	30.84	33.22	1.15	0.58	21.99	8.28	2.53
100	14.19	18.86	33.08	32.33	1.15	0.58	21.97	8.07	2.61
150	14.15	18.87	32.63	31.92	1.15	0.58	22.26	8.19	2.57
200	14.14	18.87	32.87	31.79	1.15	0.58	22.02	8.15	2.47
250	14.10	18.87	31.22	31.70	1.15	0.58	21.40	8.16	2.48
300	14.06	18.84	30.59	31.73	1.15	0.58	22.27	8.19	2.71
350	14.02	18.84	29.92	31.31	1.16	0.57	21.92	8.08	2.63
400	13.99	18.79	29.34	30.85	1.15	0.58	21.73	8.22	2.54
450	13.94	18.78	29.15	30.25	1.16	0.57	21.36	8.04	2.53
500	13.88	18.74	28.53	29.61	1.16	0.57	21.71	8.21	2.59
550	13.85	18.71	27.90	28.89	1.16	0.57	21.57	8.00	2.60
600	13.79	18.68	27.53	28.25	1.16	0.57	21.58	7.95	2.56
650	13.74	18.64	26.83	27.72	1.16	0.57	21.38	8.19	2.48
700	13.68	18.60	26.43	26.97	1.16	0.57	21.72	7.89	2.58
750	13.62	18.57	26.03	26.53	1.16	0.56	21.76	8.13	2.59
800	13.55	18.53	25.63	25.80	1.16	0.56	21.73	7.71	2.48
850	13.50	18.49	25.21	25.35	1.16	0.56	21.61	7.98	2.46
900	13.42	18.44	24.75	24.79	1.17	0.56	21.65	7.89	2.55
940	13.37	18.42	24.29	24.32	1.17	0.56	21.85	7.76	2.60
1000	13.28	18.36	23.82	23.72	1.17	0.56	21.72	7.83	2.52
1050	13.21	18.31	23.37	23.26	1.17	0.56	21.78	7.81	2.50
1100	13.14	18.26	22.98	22.82	1.17	0.56	21.56	7.99	2.59
1150	13.06	18.22	22.62	22.28	1.17	0.55	21.71	7.71	2.55
1200	12.98	18.18	22.28	21.87	1.17	0.55	21.58	7.95	2.58
1250	12.90	18.13	21.88	21.37	1.18	0.55	21.71	7.82	2.54
1300	12.83	18.08	21.56	20.90	1.18	0.55	21.66	7.81	2.56
1350	12.73	18.02	21.28	20.46	1.18	0.55	21.58	7.79	2.62
1400	12.65	17.97	20.92	20.07	1.18	0.55	21.48	7.78	2.58
1450	12.57	17.92	20.59	19.73	1.18	0.54	21.35	7.79	2.54
1500	12.48	17.87	20.34	19.33	1.18	0.54	21.44	7.85	2.53
1550	12.40	17.82	19.86	18.94	1.18	0.54	21.72	7.84	2.55
1600	12.30	17.77	19.87	18.81	1.19	0.54	21.78	8.08	2.57
1650	12.21	17.71	19.62	18.49	1.19	0.54	21.78	7.87	2.49
1700	12.13	17.66	19.24	18.25	1.19	0.54	21.73	8.01	2.44
1750	12.04	17.60	18.99	18.01	1.19	0.53	21.74	7.87	2.58
1800	11.94	17.55	18.71	17.68	1.19	0.53	21.76	8.15	2.68
1850	11.85	17.50	18.50	17.45	1.20	0.53	21.37	7.70	2.63
1900	11.76	17.44	18.27	17.18	1.20	0.53	20.96	8.02	2.59
1950	11.66	17.38	18.03	16.99	1.20	0.53	21.19	7.99	2.60
2000	11.56	17.35	17.82	16.80	1.21	0.52	21.08	7.99	2.57

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Definitions:

Input Return Loss = -S11 (dB)

Gain(Power Gain) = S21 (dB)

Reverse Isolation = -S12 (dB)

Output Return Loss = -S22 (dB)

TEST CONDITIONS: Icc = 16mA, Vd = 4.17V @Temperature = -45degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP3 Output	1dB Comp. Output	Noise Figure
					K	Delta			
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Delta	(dBm)	(dBm)	(dB)
50	13.65	18.44	36.44	24.01	1.15	0.58	16.44	3.19	2.54
100	13.63	18.50	33.77	23.77	1.16	0.57	16.41	2.91	2.58
150	13.59	18.47	34.07	23.51	1.16	0.57	16.68	3.04	2.58
200	13.59	18.47	33.41	23.47	1.16	0.57	16.48	3.14	2.53
250	13.55	18.46	34.63	23.92	1.16	0.57	15.95	2.87	2.51
300	13.51	18.42	33.84	24.27	1.16	0.57	16.69	3.11	2.70
350	13.49	18.43	32.87	24.39	1.16	0.57	16.37	2.91	2.63
400	13.47	18.41	32.46	24.57	1.16	0.57	16.25	3.17	2.59
450	13.41	18.37	32.15	24.68	1.16	0.56	15.96	2.96	2.55
500	13.35	18.32	31.51	24.86	1.16	0.56	16.27	3.19	2.56
550	13.32	18.31	30.83	24.90	1.16	0.56	16.10	2.82	2.61
600	13.28	18.27	30.38	24.95	1.16	0.56	16.18	2.94	2.58
650	13.23	18.22	29.64	25.23	1.16	0.56	15.97	3.05	2.52
700	13.17	18.18	29.20	25.27	1.17	0.56	16.29	2.93	2.58
750	13.13	18.15	28.78	25.29	1.17	0.56	16.34	3.06	2.57
800	13.05	18.11	28.33	25.18	1.17	0.56	16.30	2.73	2.52
850	13.01	18.08	27.81	25.19	1.17	0.56	16.22	3.08	2.47
900	12.95	18.03	27.22	25.13	1.17	0.55	16.23	2.92	2.54
940	12.90	18.01	26.74	24.98	1.17	0.55	16.50	2.76	2.58
1000	12.81	17.94	26.06	24.79	1.17	0.55	16.40	2.82	2.54
1050	12.75	17.91	25.57	24.57	1.17	0.55	16.55	2.91	2.55
1100	12.69	17.87	25.00	24.36	1.17	0.55	16.30	3.05	2.56
1150	12.61	17.81	24.49	24.00	1.17	0.55	16.56	2.80	2.53
1200	12.53	17.75	24.11	23.72	1.18	0.55	16.43	3.04	2.61
1250	12.48	17.72	23.64	23.25	1.18	0.54	16.64	2.95	2.58
1300	12.42	17.66	23.23	22.90	1.18	0.54	16.65	2.91	2.56
1350	12.31	17.61	22.82	22.51	1.18	0.54	16.69	2.88	2.60
1400	12.24	17.54	22.44	21.98	1.18	0.54	16.66	2.93	2.56
1450	12.17	17.50	22.09	21.62	1.18	0.54	16.54	2.91	2.58
1500	12.09	17.46	21.65	21.22	1.18	0.54	16.71	3.04	2.54
1550	12.01	17.42	21.22	20.76	1.18	0.53	17.03	3.04	2.53
1600	11.91	17.37	21.05	20.68	1.19	0.53	17.14	3.30	2.59
1650	11.83	17.32	20.72	20.34	1.19	0.53	17.24	3.13	2.50
1700	11.75	17.25	20.30	20.00	1.19	0.53	17.14	3.19	2.44
1750	11.66	17.18	20.01	19.70	1.19	0.53	17.47	3.13	2.56
1800	11.57	17.15	19.64	19.42	1.19	0.53	17.49	3.45	2.65
1850	11.49	17.11	19.38	19.18	1.19	0.52	17.61	2.97	2.61
1900	11.40	17.06	19.12	18.80	1.20	0.52	16.97	3.42	2.59
1950	11.30	16.98	18.83	18.55	1.20	0.52	17.58	3.39	2.52
2000	11.22	16.97	18.60	18.34	1.20	0.52	17.32	3.40	2.54

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MMIC Amplifier

MAR-7SM+

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 = 28mA, Vd = 4.32V @Temperature = -45degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP3 Output	1dB Comp. Output	Noise Figure
					K	Delta			
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Delta	(dBm)	(dBm)	(dB)
50	14.49	19.09	26.24	52.41	1.14	0.59	26.06	10.35	2.55
100	14.46	19.10	27.36	42.29	1.14	0.59	26.03	10.33	2.65
150	14.41	19.13	27.04	40.08	1.15	0.58	26.43	10.44	2.60
200	14.41	19.15	27.30	37.30	1.15	0.58	26.12	10.45	2.47
250	14.37	19.10	26.32	35.25	1.15	0.58	25.32	10.39	2.48
300	14.33	19.07	26.19	33.55	1.15	0.58	26.32	10.53	2.73
350	14.29	19.02	25.92	31.84	1.15	0.58	25.92	10.45	2.67
400	14.25	19.04	25.49	30.78	1.15	0.58	25.63	10.64	2.54
450	14.20	19.00	25.38	29.64	1.15	0.58	25.25	10.50	2.54
500	14.15	18.98	25.15	28.68	1.16	0.57	25.50	10.63	2.64
550	14.09	18.95	24.74	27.75	1.16	0.57	25.37	10.46	2.63
600	14.04	18.90	24.52	27.01	1.16	0.57	25.29	10.44	2.55
650	14.00	18.87	24.06	26.31	1.16	0.57	25.11	10.60	2.50
700	13.93	18.82	23.86	25.50	1.16	0.57	25.41	10.33	2.64
750	13.87	18.79	23.54	25.05	1.16	0.57	25.39	10.52	2.63
800	13.80	18.75	23.33	24.31	1.16	0.57	25.34	10.18	2.50
850	13.73	18.72	23.09	23.78	1.16	0.57	25.16	10.45	2.46
900	13.66	18.67	22.71	23.25	1.16	0.56	25.16	10.28	2.58
940	13.61	18.64	22.30	22.86	1.17	0.56	25.28	10.13	2.64
1000	13.52	18.58	22.05	22.25	1.17	0.56	25.09	10.18	2.54
1050	13.44	18.55	21.74	21.78	1.17	0.56	25.03	10.14	2.54
1100	13.36	18.50	21.38	21.42	1.17	0.56	24.80	10.40	2.62
1150	13.29	18.44	21.08	20.93	1.17	0.56	24.80	10.11	2.60
1200	13.20	18.40	20.89	20.51	1.17	0.55	24.64	10.27	2.64
1250	13.12	18.35	20.58	20.06	1.18	0.55	24.68	10.17	2.58
1300	13.04	18.31	20.28	19.68	1.18	0.55	24.51	10.18	2.59
1350	12.95	18.24	20.07	19.33	1.18	0.55	24.31	10.08	2.67
1400	12.87	18.19	19.81	18.93	1.18	0.55	24.19	10.14	2.61
1450	12.78	18.15	19.55	18.61	1.18	0.55	23.99	10.17	2.58
1500	12.68	18.09	19.31	18.31	1.18	0.55	23.98	10.12	2.56
1550	12.60	18.06	18.94	17.90	1.19	0.54	24.22	10.14	2.59
1600	12.49	18.00	18.94	17.83	1.19	0.54	24.24	10.28	2.62
1650	12.41	17.93	18.73	17.57	1.19	0.54	24.15	10.11	2.53
1700	12.32	17.88	18.42	17.31	1.19	0.54	24.05	10.15	2.46
1750	12.22	17.81	18.23	17.09	1.19	0.54	23.79	10.04	2.64
1800	12.12	17.76	17.99	16.78	1.20	0.53	23.79	10.20	2.72
1850	12.03	17.72	17.80	16.61	1.20	0.53	23.16	9.83	2.65
1900	11.94	17.66	17.61	16.38	1.20	0.53	22.89	9.99	2.61
1950	11.84	17.59	17.42	16.19	1.20	0.53	22.86	9.87	2.63
2000	11.74	17.56	17.23	16.00	1.21	0.53	22.86	9.88	2.63

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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 = 22mA, Vd = 3.83V @Temperature = +85degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP3 Output	1dB Comp. Output	Noise Figure
					K	Delta			
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Delta	(dBm)	(dBm)	(dB)
50	13.71	18.43	47.82	26.02	1.15	0.58	21.56	8.24	3.80
100	13.69	18.52	51.52	26.57	1.16	0.57	21.57	8.09	3.88
150	13.64	18.53	43.26	26.88	1.16	0.57	21.90	8.27	3.83
200	13.61	18.54	41.63	26.97	1.16	0.57	21.67	8.28	3.72
250	13.56	18.52	38.23	27.13	1.17	0.56	20.93	8.15	3.77
300	13.52	18.53	37.69	26.95	1.17	0.56	21.85	8.27	3.96
350	13.49	18.49	36.57	26.66	1.17	0.56	21.45	8.12	3.91
400	13.43	18.49	35.56	26.52	1.17	0.56	21.20	8.34	3.82
450	13.37	18.47	34.79	26.47	1.17	0.56	20.83	8.11	3.82
500	13.32	18.43	34.08	26.42	1.17	0.55	21.09	8.31	3.88
550	13.26	18.41	32.87	26.23	1.18	0.55	20.93	8.07	3.89
600	13.20	18.38	32.17	26.10	1.18	0.55	20.88	8.11	3.83
650	13.15	18.34	31.16	26.08	1.18	0.55	20.68	8.22	3.81
700	13.08	18.31	30.66	25.80	1.18	0.55	20.97	8.03	3.90
750	13.00	18.27	29.94	25.67	1.19	0.54	20.99	8.17	3.88
800	12.94	18.26	29.44	25.28	1.19	0.54	20.92	7.78	3.80
850	12.87	18.20	29.02	25.02	1.19	0.54	20.79	8.13	3.79
900	12.78	18.16	28.52	24.71	1.19	0.54	20.80	7.99	3.87
940	12.73	18.13	28.00	24.41	1.19	0.53	20.94	7.71	3.94
1000	12.63	18.09	27.52	23.97	1.20	0.53	20.76	7.85	3.85
1050	12.55	18.04	27.01	23.56	1.20	0.53	20.71	7.86	3.85
1100	12.46	17.99	26.45	23.24	1.20	0.53	20.47	8.00	3.95
1150	12.38	17.95	25.97	22.80	1.20	0.52	20.50	7.72	3.91
1200	12.30	17.90	25.63	22.47	1.21	0.52	20.36	7.90	3.96
1250	12.21	17.87	25.15	22.07	1.21	0.52	20.40	7.70	3.94
1300	12.12	17.81	24.75	21.84	1.21	0.52	20.27	7.75	3.94
1350	12.02	17.74	24.28	21.58	1.21	0.52	20.11	7.70	4.01
1400	11.94	17.70	23.75	21.24	1.22	0.51	19.97	7.69	3.95
1450	11.84	17.67	23.39	20.93	1.22	0.51	19.81	7.69	3.93
1500	11.74	17.61	23.00	20.64	1.22	0.51	19.80	7.69	3.95
1550	11.65	17.59	22.63	20.24	1.23	0.50	20.06	7.71	3.94
1600	11.54	17.51	22.52	20.16	1.23	0.50	20.07	7.88	3.98
1650	11.45	17.45	22.24	19.81	1.23	0.50	20.08	7.52	3.92
1700	11.35	17.40	21.84	19.47	1.23	0.50	19.95	7.56	3.89
1750	11.25	17.35	21.54	19.17	1.24	0.50	19.76	7.43	4.00
1800	11.15	17.31	21.18	18.84	1.24	0.49	19.77	7.59	4.08
1850	11.04	17.25	20.86	18.61	1.24	0.49	19.31	7.15	4.07
1900	10.94	17.20	20.56	18.28	1.25	0.49	18.92	7.44	4.05
1950	10.84	17.14	20.21	18.07	1.25	0.49	19.01	7.26	4.02
2000	10.74	17.12	19.99	17.94	1.26	0.48	18.92	7.18	3.99

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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 = 16mA, Vd = 3.75V @Temperature = +85degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP3 Output	1dB Comp. Output	Noise Figure
					K	Delta			
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Delta	(dBm)	(dBm)	(dB)
50	13.00	18.03	26.74	19.90	1.17	0.57	16.62	3.25	3.86
100	12.99	18.06	26.44	20.15	1.17	0.56	16.65	3.02	3.87
150	12.95	18.07	27.33	20.47	1.17	0.56	16.93	3.46	3.89
200	12.91	18.06	27.38	20.45	1.17	0.56	16.74	3.35	3.81
250	12.87	18.04	27.60	20.53	1.18	0.55	16.11	3.10	3.83
300	12.85	18.04	27.27	20.69	1.18	0.55	16.93	3.34	3.97
350	12.82	18.03	27.02	20.76	1.18	0.55	16.57	3.16	3.91
400	12.75	18.00	27.10	20.81	1.18	0.55	16.38	3.33	3.89
450	12.70	17.95	26.69	20.89	1.18	0.55	16.04	3.13	3.85
500	12.65	17.95	26.54	21.01	1.19	0.55	16.32	3.39	3.87
550	12.61	17.91	26.72	21.29	1.18	0.54	16.20	2.96	3.91
600	12.54	17.87	26.78	21.32	1.19	0.54	16.22	3.11	3.91
650	12.49	17.83	26.59	21.51	1.19	0.54	16.00	3.40	3.87
700	12.44	17.82	26.37	21.81	1.19	0.54	16.32	3.16	3.92
750	12.36	17.77	26.36	21.96	1.19	0.54	16.36	3.26	3.90
800	12.31	17.75	26.09	22.06	1.19	0.53	16.32	2.99	3.87
850	12.25	17.71	26.05	22.27	1.19	0.53	16.25	3.39	3.85
900	12.17	17.67	25.91	22.43	1.20	0.53	16.25	3.26	3.90
940	12.13	17.63	25.76	22.42	1.20	0.53	16.50	3.03	3.94
1000	12.03	17.57	25.40	22.46	1.20	0.53	16.36	3.11	3.91
1050	11.96	17.55	25.26	22.55	1.20	0.52	16.49	3.17	3.94
1100	11.89	17.50	25.09	22.63	1.20	0.52	16.26	3.27	3.96
1150	11.81	17.45	24.76	22.52	1.21	0.52	16.39	2.97	3.90
1200	11.71	17.41	24.46	22.48	1.21	0.51	16.28	3.24	3.99
1250	11.65	17.36	24.17	22.42	1.21	0.51	16.41	3.17	3.99
1300	11.58	17.31	23.94	22.43	1.21	0.51	16.37	3.11	3.97
1350	11.48	17.26	23.57	22.37	1.21	0.51	16.34	3.01	3.99
1400	11.39	17.21	23.09	22.25	1.22	0.51	16.26	3.21	3.98
1450	11.32	17.18	22.77	22.15	1.22	0.50	16.19	3.18	4.01
1500	11.23	17.10	22.42	21.97	1.22	0.50	16.25	3.19	3.96
1550	11.14	17.10	22.20	21.80	1.23	0.50	16.58	3.24	3.93
1600	11.04	17.00	22.01	21.69	1.23	0.50	16.65	3.42	3.99
1650	10.95	16.95	21.82	21.46	1.23	0.49	16.78	3.25	3.96
1700	10.85	16.91	21.48	21.22	1.23	0.49	16.69	3.47	3.93
1750	10.77	16.86	21.23	20.93	1.23	0.49	16.77	3.26	3.99
1800	10.68	16.81	20.98	20.61	1.24	0.49	16.79	3.52	4.08
1850	10.57	16.76	20.74	20.38	1.24	0.48	16.65	3.12	4.06
1900	10.47	16.70	20.45	20.13	1.24	0.48	16.16	3.47	4.07
1950	10.37	16.66	20.09	19.91	1.25	0.48	16.53	3.50	4.01
2000	10.28	16.63	19.93	19.75	1.25	0.48	16.31	3.32	3.95

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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: INPUT POWER = -20dBm, Icc = 28mA, Vd = 3.90V @Temperature = +85degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP3 Output	1dB Comp. Output	Noise Figure
					K	Delta			
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Delta	(dBm)	(dBm)	(dB)
50	14.07	18.92	30.00	33.20	1.16	0.57	25.13	9.75	3.81
100	14.05	18.86	30.26	33.73	1.16	0.57	25.14	9.90	3.91
150	13.99	18.81	29.29	34.48	1.16	0.57	25.56	9.98	3.86
200	13.97	18.80	29.57	34.35	1.16	0.57	25.24	10.02	3.73
250	13.92	18.81	28.57	32.92	1.16	0.57	24.36	10.07	3.76
300	13.88	18.80	28.85	31.59	1.16	0.57	25.42	10.19	4.00
350	13.83	18.75	28.86	30.69	1.16	0.57	24.95	10.18	3.91
400	13.78	18.77	28.77	30.00	1.17	0.56	24.62	10.34	3.81
450	13.72	18.76	28.62	29.27	1.17	0.56	24.19	10.26	3.81
500	13.66	18.70	28.24	28.62	1.17	0.56	24.36	10.41	3.92
550	13.60	18.69	27.86	27.90	1.17	0.56	24.18	10.33	3.92
600	13.55	18.68	27.56	27.28	1.18	0.55	24.07	10.32	3.83
650	13.48	18.62	27.05	26.71	1.18	0.55	23.84	10.49	3.80
700	13.41	18.59	26.78	26.00	1.18	0.55	24.04	10.35	3.94
750	13.34	18.56	26.42	25.56	1.18	0.55	24.02	10.46	3.93
800	13.27	18.53	26.14	24.91	1.18	0.55	23.90	10.19	3.81
850	13.20	18.49	26.03	24.44	1.19	0.54	23.72	10.42	3.78
900	13.10	18.46	25.79	23.93	1.19	0.54	23.71	10.33	3.90
940	13.05	18.42	25.34	23.55	1.19	0.54	23.69	10.15	3.96
1000	12.95	18.35	25.07	22.98	1.19	0.54	23.46	10.18	3.86
1050	12.86	18.32	24.76	22.47	1.20	0.53	23.26	10.19	3.84
1100	12.77	18.28	24.36	22.07	1.20	0.53	23.04	10.31	3.97
1150	12.68	18.24	24.05	21.63	1.20	0.53	22.92	10.04	3.96
1200	12.59	18.19	23.82	21.28	1.20	0.53	22.76	10.15	3.96
1250	12.50	18.14	23.51	20.90	1.21	0.52	22.68	10.02	3.92
1300	12.41	18.10	23.22	20.59	1.21	0.52	22.48	9.93	3.96
1350	12.31	18.04	22.88	20.31	1.21	0.52	22.20	9.85	4.05
1400	12.22	17.99	22.52	19.99	1.22	0.52	22.03	9.85	3.98
1450	12.12	17.93	22.24	19.71	1.22	0.51	21.85	9.81	3.95
1500	12.02	17.88	21.97	19.41	1.22	0.51	21.76	9.67	3.95
1550	11.93	17.87	21.60	19.04	1.23	0.51	21.98	9.68	3.98
1600	11.82	17.79	21.60	18.93	1.23	0.51	21.95	9.73	4.01
1650	11.72	17.74	21.36	18.58	1.23	0.50	21.85	9.42	3.91
1700	11.62	17.68	21.00	18.32	1.23	0.50	21.70	9.39	3.90
1750	11.52	17.62	20.72	18.06	1.24	0.50	21.39	9.25	4.04
1800	11.41	17.58	20.41	17.72	1.24	0.50	21.36	9.21	4.11
1850	11.30	17.52	20.17	17.49	1.24	0.49	20.76	8.82	4.06
1900	11.20	17.47	19.90	17.25	1.25	0.49	20.45	8.95	4.08
1950	11.09	17.41	19.56	17.07	1.25	0.49	20.39	8.69	4.05
2000	10.99	17.37	19.38	16.91	1.26	0.49	20.38	8.66	4.04

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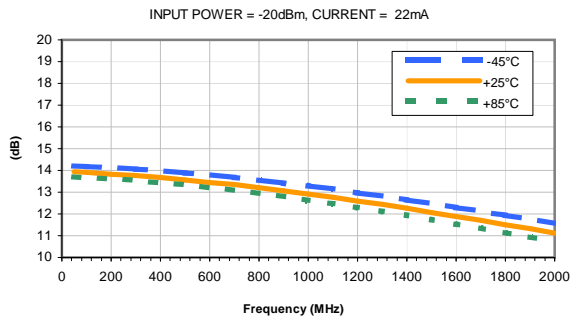


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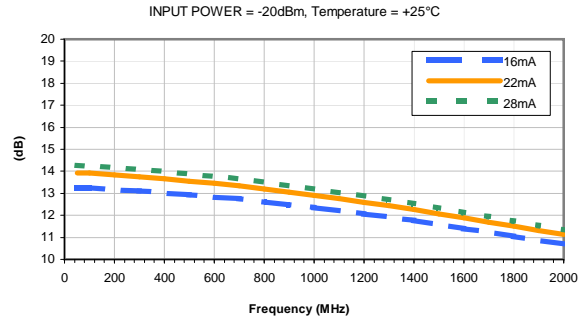


Typical Performance Curves

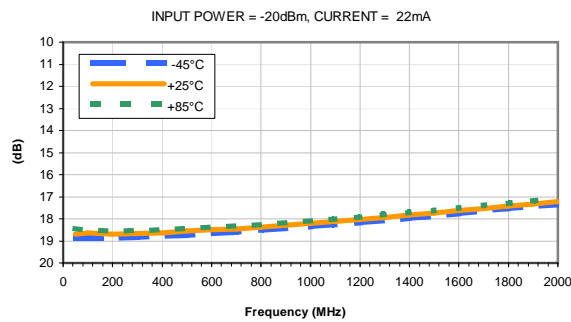
GAIN vs. TEMPERATURE



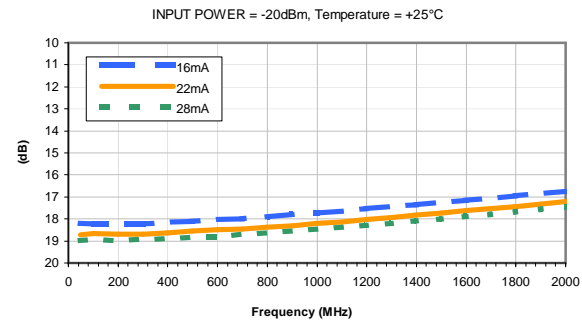
GAIN vs. CURRENT



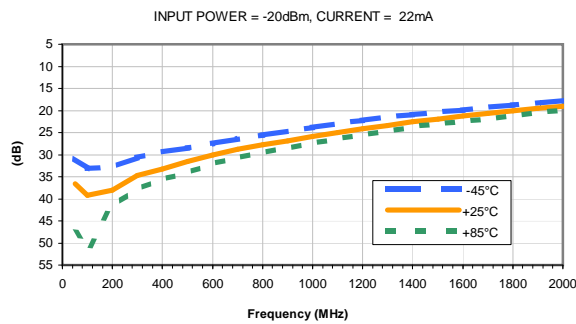
ISOLATION vs. TEMPERATURE



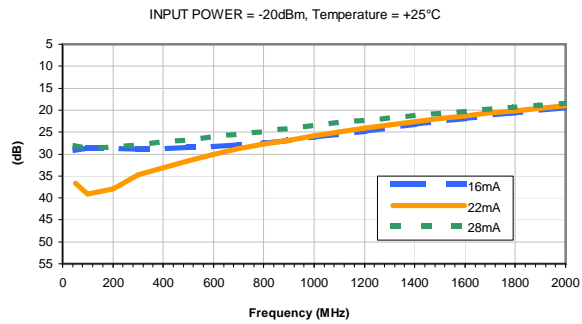
ISOLATION vs. CURRENT



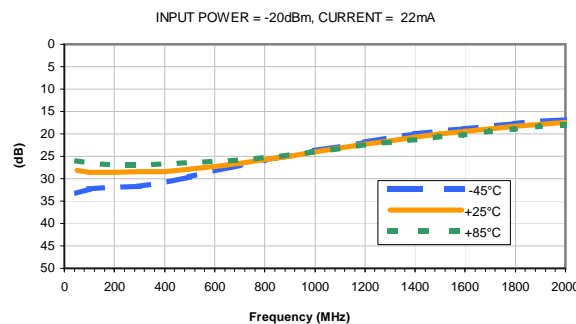
INPUT RETURN LOSS vs. TEMPERATURE



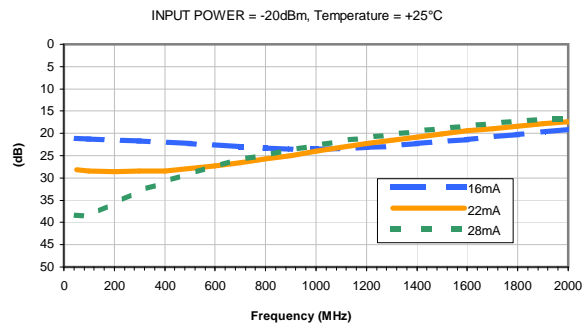
INPUT RETURN LOSS vs. CURRENT



OUTPUT RETURN LOSS vs. TEMPERATURE



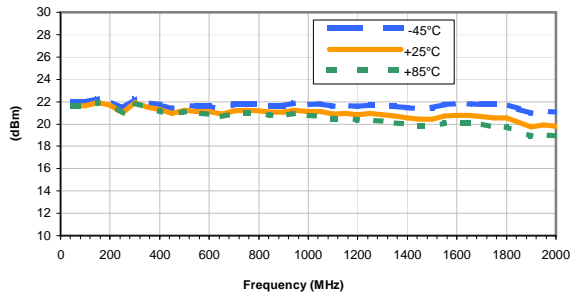
OUTPUT RETURN LOSS vs. CURRENT



Typical Performance Curves

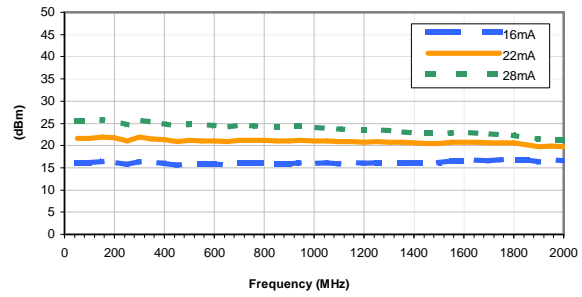
OUTPUT IP3 vs. TEMPERATURE

INPUT POWER = -20dBm, CURRENT = 22mA



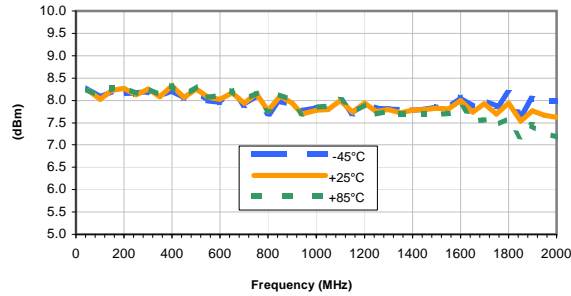
OUTPUT IP-3 vs. CURRENT

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



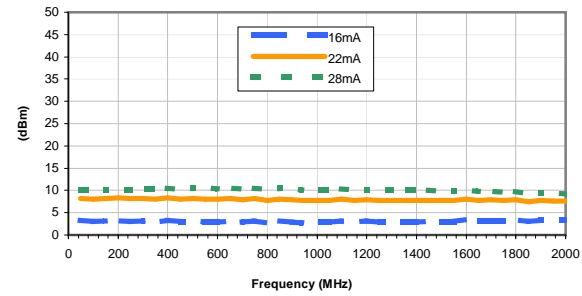
OUTPUT POWER at 1dB Compression vs. TEMPERATURE

CURRENT = 22mA



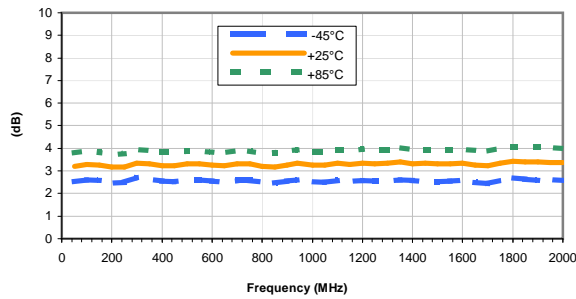
OUTPUT POWER at 1dB Compression vs. CURRENT

Temperature = +25°C



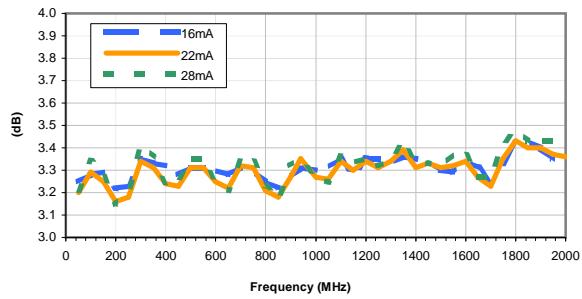
Noise Figure vs. TEMPERATURE

CURRENT = 22mA



Noise Figure vs. CURRENT

Temperature = +25°C



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