

## Typical Performance Data

**NOTE: Use PDF Bookmarks to view DATA at required conditions**

**Definitions:**

Input Return Loss = -S11 (dB)

Gain(Power Gain) = S21 (dB)

Reverse Isolation = -S12 (dB)

Output Return Loss = -S22 (dB)

TEST CONDITIONS: Vd = 9.00V, Id = 116mA @ Temperature = +25°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output	1dB Comp. Output	Noise Figure
					K	Measure			
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dB)
50	16.38	20.84	15.40	12.53	1.09	0.58	37.75	23.85	3.33
100	16.51	20.58	20.34	14.81	1.09	0.57	37.21	24.14	3.32
200	16.56	20.41	23.55	16.09	1.09	0.55	40.13	24.74	3.17
400	16.59	20.38	26.88	17.70	1.09	0.56	35.93	25.06	2.96
600	16.56	20.42	31.30	19.26	1.09	0.57	36.24	24.86	2.84
800	16.49	20.49	36.88	21.16	1.10	0.59	36.53	24.72	2.89
1000	16.46	20.50	34.07	23.90	1.11	0.60	36.90	24.26	2.78
1200	16.39	20.55	29.11	26.65	1.11	0.62	35.75	24.03	2.78
1400	16.30	20.60	26.25	29.45	1.12	0.63	35.95	24.32	2.81
1600	16.22	20.67	24.73	30.68	1.13	0.65	35.65	24.23	2.93
1800	16.12	20.76	24.15	29.50	1.14	0.66	35.28	24.29	2.93
2000	16.00	20.85	23.86	27.69	1.15	0.68	37.45	24.31	2.88
2200	15.92	20.92	24.41	26.49	1.16	0.69	35.08	24.24	2.89
2400	15.87	20.93	25.41	25.60	1.17	0.69	34.41	24.28	2.96
2600	15.81	20.97	26.22	24.74	1.17	0.70	36.09	24.70	2.98
2800	15.74	21.05	26.64	24.47	1.19	0.71	34.56	23.95	3.14
3000	15.69	21.09	26.42	25.65	1.19	0.71	34.60	23.59	3.20
3200	15.64	21.14	25.39	29.04	1.20	0.72	35.69	24.09	3.17
3400	15.60	21.24	22.93	42.09	1.21	0.73	35.45	22.85	3.23
3600	15.54	21.32	19.95	30.78	1.22	0.74	35.10	23.20	3.31
3800	15.48	21.43	17.15	22.88	1.23	0.75	34.72	23.32	3.31
4000	15.40	21.58	14.91	18.62	1.24	0.76	34.24	22.56	3.46
4200	15.32	21.71	13.12	15.82	1.24	0.76	34.88	22.83	3.52
4400	15.23	21.90	11.82	13.94	1.25	0.76	34.28	22.89	3.44
4600	15.16	22.01	10.97	12.72	1.24	0.76	34.94	22.66	3.52
4800	15.10	22.17	10.46	12.04	1.24	0.77	35.27	22.41	3.65
5000	15.09	22.25	10.33	11.84	1.24	0.78	35.08	22.59	3.59
5200	15.13	22.32	10.58	12.06	1.24	0.79	34.77	22.22	3.60
5400	15.20	22.37	11.15	12.62	1.23	0.81	34.80	22.78	3.73
5600	15.31	22.34	11.98	13.46	1.23	0.82	34.62	22.52	3.71
5800	15.45	22.32	12.95	14.29	1.22	0.82	34.73	22.49	3.79
6000	15.58	22.31	13.92	14.99	1.21	0.82	36.00	22.27	3.85
6200	15.72	22.27	14.70	15.58	1.20	0.81	36.22	21.71	3.99
6400	15.88	22.22	15.26	16.59	1.20	0.80	35.71	21.17	4.11
6600	16.02	22.19	15.08	19.07	1.20	0.80	35.85	20.46	4.23
6800	16.06	22.23	13.58	25.13	1.21	0.81	34.46	19.83	4.40
7000	15.92	22.49	11.02	24.69	1.23	0.84	33.45	18.67	4.61
7200	15.53	22.94	8.34	15.68	1.25	0.88	31.67	18.06	4.88
7400	14.85	23.73	6.19	11.03	1.29	0.91	30.04	16.93	5.04
7600	13.95	24.73	4.69	8.24	1.34	0.92	29.57	16.86	5.23
7800	12.99	25.76	3.70	6.49	1.39	0.91	28.60	15.95	5.39
8000	12.03	26.83	3.07	5.37	1.46	0.89	28.57	15.71	5.50
8200	11.20	27.67	2.70	4.53	1.51	0.84	27.93	15.37	5.58

Note: Test data of Die packaged in industry standard SOT-89 package



## Typical Performance Data

### Definitions:

Input Return Loss = -S11 (dB)

Gain(Power Gain) = S21 (dB)

Reverse Isolation = -S12 (dB)

Output Return Loss = -S22 (dB)

TEST CONDITIONS: Vd = 8.5V, Id = 106mA @ Temperature = +25°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output	1dB Comp. Output	Noise Figure
					K	Measure			
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dB)
50	16.35	20.85	15.47	12.53	1.10	0.58	35.63	23.26	3.29
100	16.48	20.54	20.54	14.90	1.09	0.57	36.10	23.59	3.26
200	16.54	20.41	23.93	16.21	1.09	0.56	35.64	24.19	3.12
400	16.56	20.38	27.55	17.84	1.09	0.56	37.61	24.49	2.92
600	16.53	20.43	32.39	19.40	1.10	0.58	37.08	24.30	2.86
800	16.46	20.47	37.55	21.33	1.10	0.60	36.70	24.15	2.79
1000	16.43	20.47	33.57	24.14	1.11	0.60	36.14	23.68	2.72
1200	16.36	20.54	28.74	27.11	1.11	0.62	35.68	23.44	2.75
1400	16.26	20.61	25.89	30.35	1.12	0.64	35.93	23.74	2.78
1600	16.18	20.68	24.53	32.19	1.13	0.65	35.57	23.64	2.88
1800	16.08	20.74	23.98	31.10	1.14	0.66	35.14	23.84	2.86
2000	15.95	20.84	23.81	28.97	1.16	0.68	35.36	23.73	2.85
2200	15.87	20.89	24.40	27.60	1.16	0.69	36.53	23.79	2.85
2400	15.82	20.94	25.41	26.42	1.17	0.70	34.53	23.70	2.86
2600	15.76	20.99	26.34	25.32	1.18	0.70	34.94	24.25	2.96
2800	15.69	21.06	26.85	24.78	1.19	0.71	32.94	23.37	3.08
3000	15.63	21.13	26.56	25.73	1.20	0.72	35.83	23.01	3.16
3200	15.57	21.18	25.56	28.41	1.21	0.73	34.65	23.63	3.24
3400	15.52	21.29	23.11	34.75	1.22	0.74	34.68	22.39	3.23
3600	15.46	21.37	20.08	29.94	1.23	0.75	34.08	22.73	3.28
3800	15.40	21.50	17.31	23.02	1.24	0.76	34.24	22.86	3.29
4000	15.32	21.61	15.05	18.90	1.25	0.76	34.58	22.09	3.37
4200	15.23	21.78	13.25	16.16	1.26	0.77	33.78	22.36	3.47
4400	15.15	21.94	11.94	14.33	1.26	0.77	33.98	22.42	3.46
4600	15.07	22.09	11.10	13.12	1.26	0.78	33.96	22.20	3.52
4800	15.02	22.20	10.60	12.49	1.26	0.78	35.16	22.06	3.57
5000	15.01	22.31	10.47	12.36	1.26	0.79	34.82	22.25	3.49
5200	15.04	22.40	10.73	12.69	1.26	0.81	33.45	21.89	3.52
5400	15.12	22.41	11.29	13.40	1.26	0.82	34.71	22.44	3.67
5600	15.22	22.42	12.17	14.49	1.26	0.83	35.35	22.19	3.70
5800	15.33	22.42	13.17	15.53	1.25	0.84	35.15	22.14	3.74
6000	15.45	22.42	14.18	16.36	1.25	0.83	35.35	21.91	3.83
6200	15.57	22.38	15.07	16.90	1.24	0.82	35.66	21.44	3.94
6400	15.69	22.37	15.75	17.81	1.24	0.81	35.38	20.77	4.08
6600	15.81	22.35	15.80	20.23	1.24	0.81	33.50	20.15	4.18
6800	15.83	22.43	14.44	27.28	1.25	0.82	33.19	19.50	4.36
7000	15.69	22.66	11.83	27.50	1.27	0.85	31.72	18.33	4.56
7200	15.33	23.11	9.02	16.62	1.30	0.89	30.25	17.62	4.72
7400	14.70	23.82	6.72	11.70	1.34	0.93	28.63	16.51	4.97
7600	13.86	24.78	5.08	8.77	1.39	0.94	28.17	16.49	5.08
7800	12.95	25.75	4.00	6.92	1.44	0.93	27.43	15.63	5.27
8000	12.04	26.69	3.29	5.72	1.49	0.91	27.62	15.54	5.45
8200	11.25	27.51	2.87	4.83	1.54	0.87	26.94	15.10	5.47

Note: Test data of Die packaged in industry standard SOT-89 package



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 The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: www.minicircuits.com



IF/RF MICROWAVE COMPONENTS

## Typical Performance Data

### Definitions:

Input Return Loss = -S11 (dB)

Gain(Power Gain) = S21 (dB)

Reverse Isolation = -S12 (dB)

Output Return Loss = -S22 (dB)

TEST CONDITIONS: Vd = 9.5V, Id = 125mA @ Temperature = +25°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output	1dB Comp. Output	Noise Figure
					K	Measure			
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dB)
50	16.39	20.90	15.34	12.60	1.10	0.58	36.69	24.23	3.42
100	16.52	20.56	20.24	14.80	1.09	0.56	36.65	24.50	3.39
200	16.58	20.41	23.33	16.04	1.09	0.55	38.06	25.08	3.22
400	16.61	20.38	26.51	17.62	1.09	0.56	36.67	25.41	3.00
600	16.58	20.43	30.64	19.14	1.09	0.57	36.23	25.21	2.94
800	16.51	20.49	36.25	21.04	1.10	0.59	36.94	25.08	2.83
1000	16.48	20.48	34.39	23.76	1.10	0.60	36.14	24.62	2.76
1200	16.41	20.55	29.40	26.41	1.11	0.61	37.18	24.53	2.80
1400	16.32	20.62	26.33	28.86	1.12	0.63	37.35	24.69	2.79
1600	16.24	20.68	24.84	29.76	1.13	0.64	35.79	24.60	2.90
1800	16.14	20.74	24.17	28.65	1.14	0.66	36.47	24.78	2.93
2000	16.02	20.86	23.84	26.81	1.15	0.68	35.57	24.67	2.93
2200	15.94	20.91	24.44	25.72	1.16	0.69	35.66	24.73	2.94
2400	15.89	20.93	25.30	24.94	1.16	0.69	35.62	24.65	3.08
2600	15.84	20.96	26.09	24.31	1.17	0.69	35.69	25.06	3.02
2800	15.78	21.03	26.44	24.10	1.18	0.70	36.02	24.31	3.12
3000	15.73	21.06	26.19	25.38	1.19	0.71	35.10	23.96	3.20
3200	15.68	21.13	25.18	28.74	1.20	0.72	34.78	24.45	3.27
3400	15.64	21.21	22.75	39.25	1.21	0.73	35.45	23.21	3.25
3600	15.59	21.28	19.78	29.99	1.21	0.74	35.91	23.57	3.39
3800	15.53	21.40	17.02	22.45	1.22	0.74	35.43	23.58	3.37
4000	15.46	21.48	14.77	18.27	1.22	0.75	34.07	22.91	3.48
4200	15.37	21.64	12.98	15.54	1.23	0.75	34.44	23.18	3.54
4400	15.29	21.84	11.68	13.64	1.23	0.76	34.55	23.14	3.52
4600	15.21	21.98	10.83	12.42	1.23	0.76	33.49	22.89	3.56
4800	15.15	22.11	10.35	11.72	1.23	0.76	34.71	22.74	3.66
5000	15.14	22.24	10.22	11.48	1.23	0.77	35.11	22.81	3.56
5200	15.18	22.28	10.46	11.64	1.22	0.79	34.16	22.43	3.72
5400	15.26	22.32	11.00	12.10	1.21	0.80	35.43	22.99	3.76
5600	15.38	22.30	11.81	12.84	1.20	0.81	34.34	22.73	3.80
5800	15.52	22.29	12.76	13.53	1.20	0.81	34.36	22.72	3.87
6000	15.67	22.18	13.70	14.16	1.18	0.81	36.27	22.51	3.93
6200	15.83	22.21	14.43	14.77	1.18	0.80	36.39	21.96	4.10
6400	16.00	22.11	14.87	15.79	1.17	0.79	36.59	21.44	4.19
6600	16.16	22.08	14.54	18.10	1.17	0.79	34.63	20.74	4.31
6800	16.21	22.13	12.95	22.59	1.18	0.80	34.01	20.13	4.50
7000	16.06	22.38	10.41	21.50	1.19	0.83	33.79	19.08	4.69
7200	15.63	22.89	7.84	14.64	1.22	0.87	32.22	18.46	4.87
7400	14.91	23.71	5.80	10.41	1.26	0.90	30.75	17.32	5.11
7600	13.96	24.80	4.39	7.81	1.31	0.91	30.35	17.21	5.26
7800	12.96	25.85	3.48	6.16	1.36	0.90	29.35	16.40	5.44
8000	11.97	26.94	2.91	5.10	1.43	0.87	29.63	16.14	5.61
8200	11.11	27.86	2.58	4.32	1.49	0.83	28.72	15.78	5.62

Note: Test data of Die packaged in industry standard SOT-89 package



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IF/RF MICROWAVE COMPONENTS