RF AMPLIFIER
MODEL *TM9124*

Available as: TM9124, 4 Pin TO-8 (T4)
TN9124, 4 Pin Surface Mount (SM3)
FP9124, 4 Pin Flatpack (FP4)
BX9124,Connectorized Housing (H1)

Features

- High Gain: 20 dB Typical
- Medium Output Power: +8 dBm Typical
- Operating Temp. - 55 ºC to +85 ºC
- Environmental Screening Available

Typical Intermodulation Performance at 25 º C

Second Order Harmonic Intercept Point ..... +47 (Typ.)
Second Order Two Tone Intercept Point ..... +42 (Typ.)
Third Order Two Tone Intercept Point ..... +21 (Typ.)

Specifications

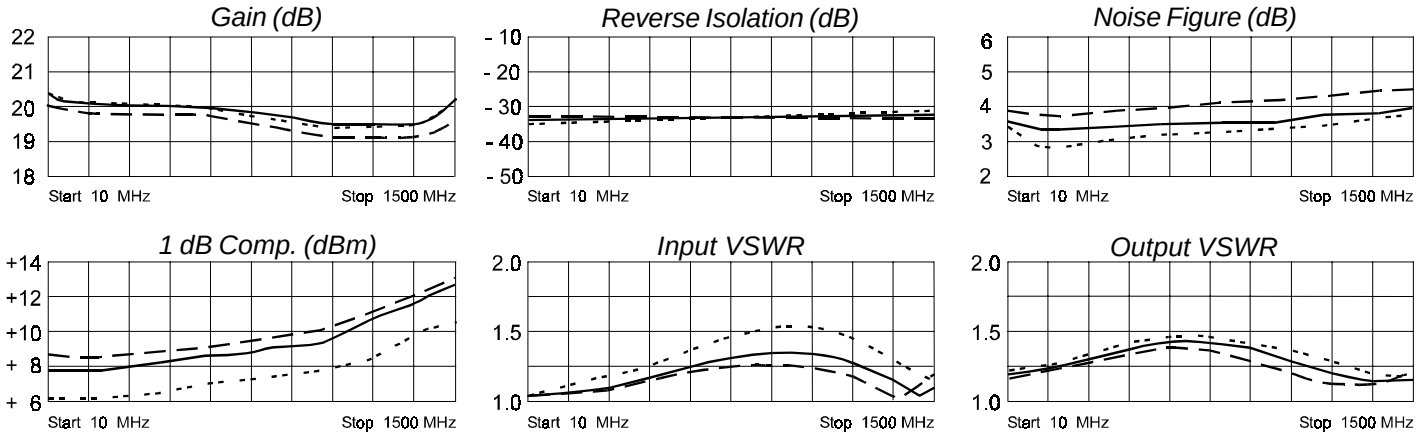
CHARACTERISTIC	TYPICAL Ta= 25 ºC	MIN/MAX Ta = -55 ºC to +85 ºC
Frequency	10 - 1500 MHz	10 - 1500 MHz
Gain (dB)	20	18.0 Min.
Power @ 1 dB Comp. (dBm)	+8	+6.0 Min.
Reverse Isolation (dB)	- 32	- 30 Max.
VSWR In Out	<1.4:1 <1.4:1	2.0:1 Max. 2.0:1 Max.
Noise figure (dB)	<4.0	5.5 Max.
Power Vdc mA	+15 34	+15 38 Max.

Note: Care should always be taken to effectively ground the case of each unit.

Maximum Ratings

Ambient Operating Temperature ..... -55ºC to + 100 ºC
Storage Temperature ..... -62ºC to + 125 ºC
Case Temperature ..... + 125 ºC
DC Voltage ..... + 18 Volts
Continuous RF Input Power ..... + 6 dBm
Short Term RF Input Power ..... 50 Milliwatts
..... (1 Minute Max.)
Maximum Peak Power ..... 0.5 Watt
(3 µsec Max.)

Typical Performance Data



Legend ——— *+ 25 ºC* – – – *+ 85 ºC* - - - - - - *-55 ºC*

Linear S-Parameters

FREQ. MHz	S11 Mag	S11 Deg	S21 Mag	S21 Deg	S12 Mag	S12 Deg	S22 Mag	S22 Deg
10	.02	-38	10.48	-0	.02	0	.08	-170
50	.02	-50	10.26	-9	.02	-5	.08	-172
100	.02	-73	10.18	-18	.02	-7	.09	-171
200	.03	-118	10.12	-36	.02	-0	.10	-171
400	.07	-170	10.04	-72	.02	-4	.15	176
600	.12	150	10.10	-108	.02	-1	.18	151
800	.17	113	10.10	-145	.02	-14	.19	122
1000	.18	81	9.95	178	.02	-20	.16	88
1200	.14	52	9.75	141	.03	-37	.12	47
1400	.04	28	9.91	105	.03	-47	.08	-14
1500	.04	167	10.20	84	.02	-52	.08	-56

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