

RF AMPLIFIER

MODEL *TM9524*

Available as: TM9524, 4 Pin TO-8 (T4)
 TN9524-3, 4 Pin Surface Mount (SM3)
 FP9524-4, 4 Pin Flatpack (FP4)
 BX9524, Connectorized Housing (H1)

Features

- High Gain: 22 dB Typical
- Medium Output Power: +13 dBm Typical

Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +37 (Typ.)
 Second Order Two Tone Intercept Point +31 (Typ.)
 Third Order Two Tone Intercept Point +23 (Typ.)

Specifications

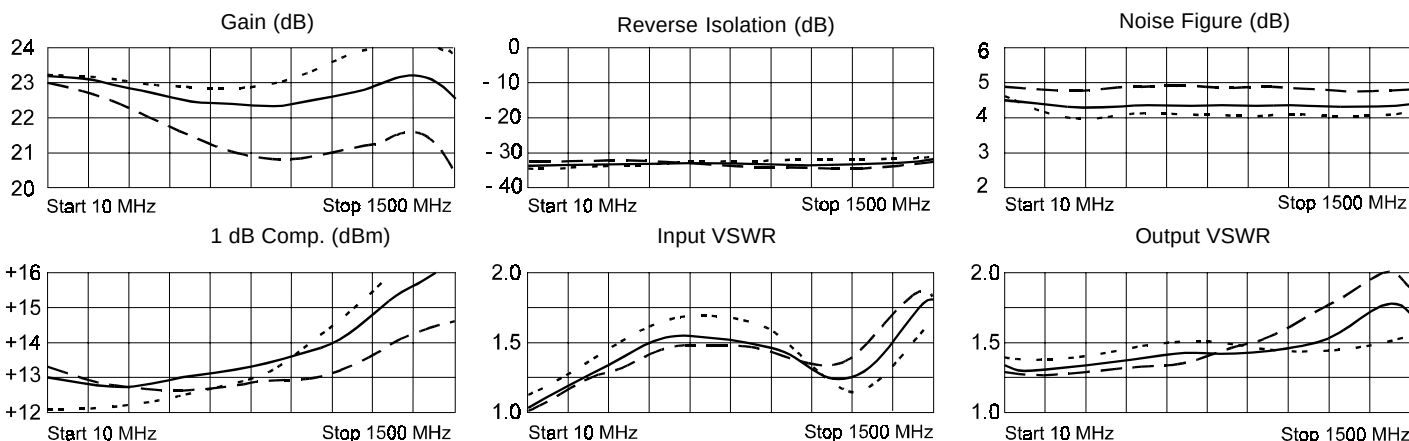
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	10 - 1500 MHz	10 - 1500 MHz
Gain (dB)	22.0	20.0 Min.
Power @ 1 dB Comp. (dBm)	+13	+10.0 Min.
Reverse Isolation (dB)	- 33	- 30 Max.
VSWR In	<1.75:1	2.0:1 Max.
Out	<1.75:1	2.2:1 Max.
Noise figure (dB)	4.3	5.0 Max.
Power Vdc	+15	+15
mA	56	65 Max.

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

Maximum Ratings

Ambient Operating Temperature -55°C to + 100 °C
 Storage Temperature -62°C to + 125 °C
 Case Temperature + 125 °C
 DC Voltage + 18 Volts
 Continuous RF Input Power + 20 dBm
 Short Term RF Input Power 200 Milliwatts
 (1 Minute Max.)
 Maximum Peak Power 0.5 Watt
 3 µsec Max.)

Typical Performance Data



Legend ——— + 25 °C - - - + 85 °C -55 °C

Linear S-Parameters

FREQ. MHz	S11 Mag	S11 Deg	S21 Mag	S21 Deg	S12 Mag	S12 Deg	S22 Mag	S22 Deg
10	.01	147	14.76	4	.02	6	.14	162
50	.03	-124	14.70	- 11	.02	2	.13	172
100	.06	-116	14.65	- 24	.02	4	.13	168
300	.15	-145	14.00	- 73	.02	- 6	.15	148
500	.21	-173	13.30	-119	.02	- 4	.17	111
700	.22	159	12.74	-185	.02	- 7	.18	66
900	.19	133	12.57	150	.03	-17	.18	9
1100	.12	117	12.58	102	.02	-26	.21	- 51
1300	.12	149	13.19	48	.02	-29	.28	-113
1500	.24	118	13.03	- 21	.03	-32	.32	168

Amplifonix

2707 Black Lake Place, Philadelphia, PA 19154

TEL 215-464-4000 • • • • FAX 215-464-4001

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