RF AMPLIFIER MODEL *TM9524*

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

Features

- High Gain: 22 dB Typical
- Operating Temp. - 55 ºC to +85 ºC
- Environmental Screening Available

Typical Intermodulation Performance at 25 º C

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

Specifications

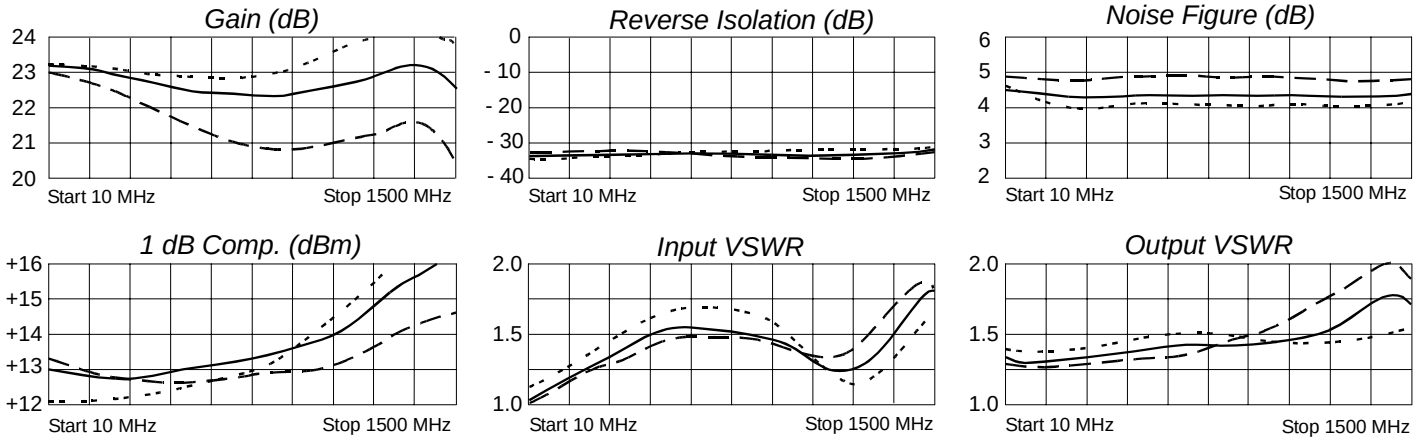
CHARACTERISTIC	TYPICAL Ta= 25 ºC	MIN/MAX Ta = -55 ºC to +85 ºC
Frequency	10 - 1500 MHz	10 - 1500 MHz
Gain (dB)	22.0	20.0 Min.
Power @ 1 dB Comp. (dBm)	+13	+10.0 Min.
Reverse Isolation (dB)	-33	-30 Max.
VSWR In Out	<1.75:1 <1.75:1	2.0:1 max. 2.2:1 Max.
Noise figure (dB)	4.3	5.0 Max.
Power Vdc mA	+15 56	+15 65 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 ..... + 13 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	.10	-173	6.98	0	.03	4	.21	-176
50	.11	177	6.88	-8	.03	-0	.22	-180
100	.11	172	6.84	-16	.03	1	.22	178
250	.12	156	6.83	-39	.03	-4	.24	173
500	.15	129	6.90	-79	.03	-3	.28	158
750	.18	100	7.01	-119	.03	-7	.31	132
1000	.21	70	7.17	-160	.03	-11	.30	98
1250	.18	44	7.04	158	.03	-21	.23	55
1500	.14	39	6.92	117	.03	-43	.15	-9
1750	.16	50	7.04	75	.03	-46	.16	-99
2000	.27	29	7.61	22	.03	-54	.30	-165

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