

RF AMPLIFIER

MODEL *TM5125*

Available as: TM5125, 4 Pin TO-8 (T4)
 TN5125, 4 Pin Surface Mount (SM3)
 FP5125, 4 Pin Flatpack (FP4)
 BX5125, Connectorized Housing (H1)

Features

- High Gain: 20.5 dB Typical
- High Power: +24 dBm Typical
- Operating Temp. - 55 °C to +85 °C
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	5-125 MHz	10-100 MHz
Gain (dB)	20.5	19.5 Min./21 Max
Power @ 1 dB Comp. (dBm)	+24	+22.5 Min.
Reverse Isolation (dB)	-24	-23 Max.
VSWR In	1.7:1	2.2:1 Max.
Out	1.35:1	2.0:1 Max.
Noise Figure (dB)	2.0	3.0 Max.
Power Vdc	+15	+15
mA	80	90 Max.

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

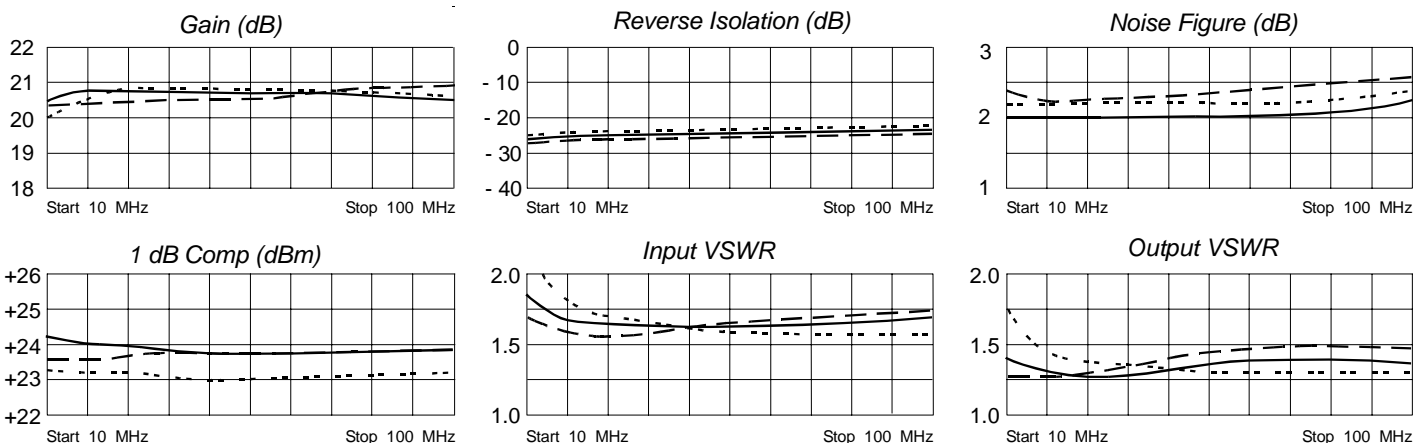
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point..... +58 dBm (Typ.)
 Second Order Two Tone Intercept Point..... +52 dBm (Typ.)
 Third Order Two Tone Intercept Point.....+40 dBm (Typ.)

Maximum Ratings

Ambient Operating Temperature -55°C to + 100 °C
 Storage Temperature -62°C to + 125 °C
 Case Temperature + 125 °C
 DC Voltage + 18Volts
 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 °C - - - - + 85 °C ······ -55 °C

Linear S-Parameters

FREQ. MHz	S11		S21		S12		S22	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
5	.39	-32.94	9.94	-151.50	.05	-151.80	.26	-19.89
10	.29	-26.29	10.56	-168.32	.05	-172.06	.15	-23.55
25	.26	-20.09	10.79	176.24	.05	169.91	.12	8.61
50	.25	-25.12	10.79	162.45	.05	154.52	.17	18.79
75	.26	-34.68	10.69	150.84	.06	139.83	.20	15.63
100	.27	-46.93	10.52	140.02	.06	126.88	.22	8.47



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 06/16/04

www.spectrummicrowave.com Spectrum Microwave (Europe) · 2707 Black Lake Place · Philadelphia, Pa. 19154 · PH (215) 464-4000 · Fax (215) 464-4001