RF AMPLIFIER MODEL *TM5126*

Available as: TM5126, 4 Pin TO-8 (T4)
TN5126, 4 Pin Surface Mount (SM3)
FP5126, 4 Pin Flatpack (FP4)
BX5126, Connectorized Housing (H1)

Features

- Gain: 15.0 dB Typical
- Output Power: +17 dBm Typical
- Operating Temp. - 55 ºC to +85 ºC
- Environmental Screening Available

Typical Intermodulation Performance at 25 º C

Second Order Harmonic Intercept Point.....+48 dBm (Typ.)
Second Order Two Tone Intercept Point..... +42 dBm (Typ.)
Third Order Two Tone Intercept Point..... +32 dBm (Typ.)

Specifications

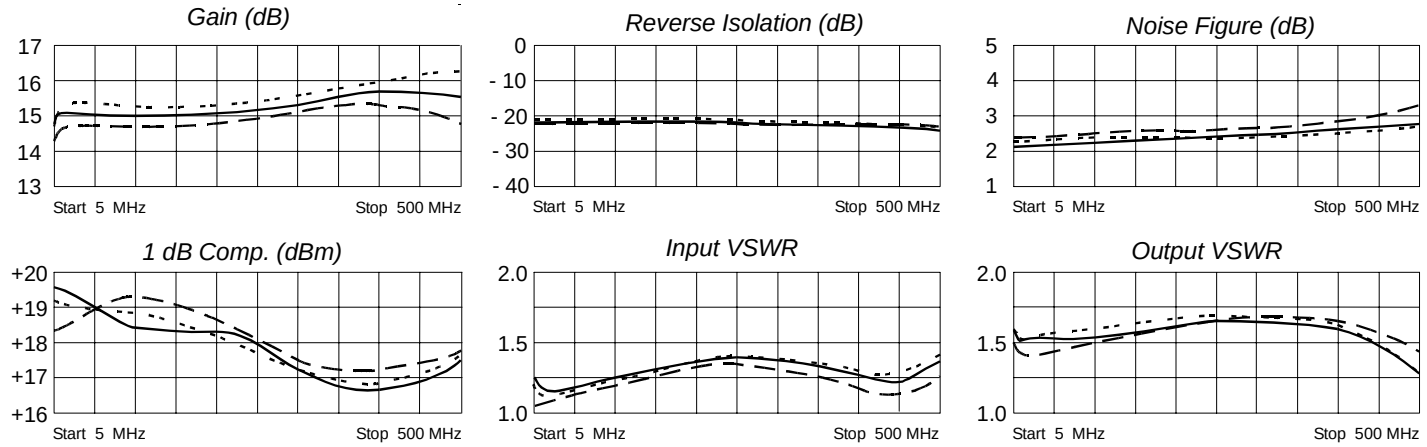
CHARACTERISTIC	TYPICAL Ta= 25 ºC	MIN/MAX Ta = -55 ºC to +85 ºC
Frequency	5-500 MHz	5-500 MHz
Gain (dB)	15	14.0 Min.
Power @ 1 dB Comp. (dBm)	+17	+16.0 Min.
Reverse Isolation (dB)	-21	-20 Max.
VSWR In Out	<1.5:1 <1.75:1	2.0:1 Max. 2.0:1 Max.
Noise Figure (dB)	<3.0	3.5 Max.
Power Vdc mA	+15 50	+15 55 Max.

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 ..... + 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 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
5	.11	- 46	5.48	-166	.09	-165	.22	- 9
10	.08	- 38	5.58	-175	.09	-175	.21	- 9
50	.08	- 60	5.57	164	.09	163	.21	- 25
100	.11	- 93	5.53	146	.08	144	.21	- 48
200	.14	-145	5.54	112	.08	109	.22	- 87
300	.15	169	5.78	76	.08	73	.23	-121
400	.12	111	6.08	35	.07	35	.21	-150
500	.15	45	6.08	- 16	.06	- 3	.13	-172
600	.31	- 7	4.83	- 75	.04	- 46	.15	- 98

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