

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 °C to +85 °C
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
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	1.50:1	2.0:1 Max.
Out	1.75:1	2.0:1 Max.
Noise Figure (dB)	3.0	4.0 Max.
Power Vdc	+15	+15
mA	50	55 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.....+48 dBm (Typ.)
 Second Order Two Tone Intercept Point..... +42 dBm (Typ.)
 Third Order Two Tone Intercept Point..... +32 dBm (Typ.)

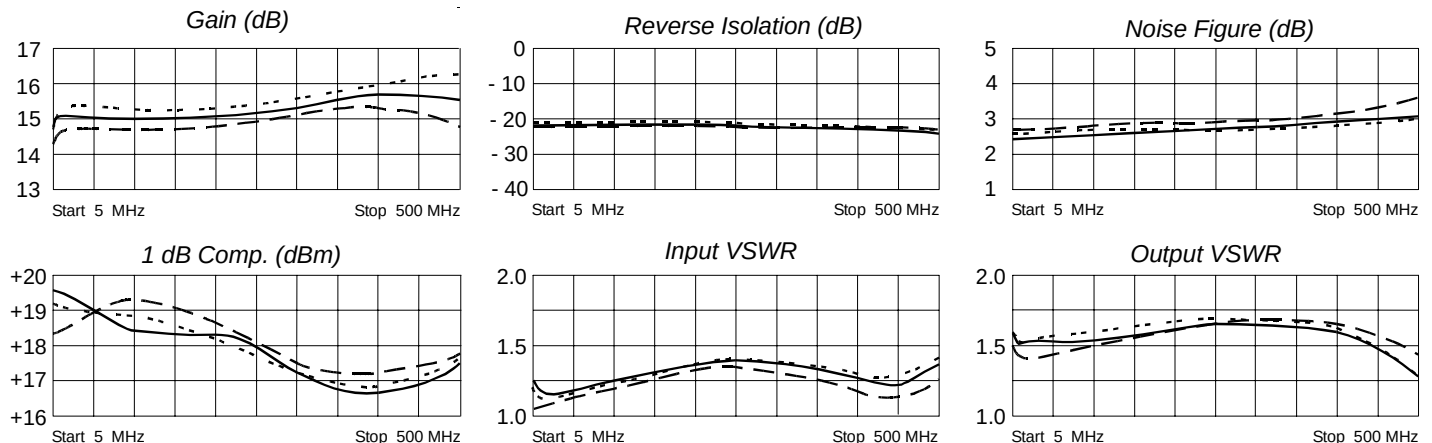
Maximum (NO DAMAGE) Ratings

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 + 13 dBm
 Short Term RF Input Power..... 50 Milliwatts (1 Minute Max.)
 Maximum Peak Power..... 0.5 Watt (3 µsec Max.)

Revision: July 8, 2024

ECN: NF from 3.5 dB to 4.0 dB 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	.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

