

RF AMPLIFIER

MODEL *TM5149PM*

Available as: TM5149PM, 4 Pin TO-8 (T4)
 TN5149PM, 4 Pin Surface Mount (SM3)
 FP5149PM, 4 Pin Flatpack (FP4)
 BX5149PM, Connectorized Housing (H1)

Features

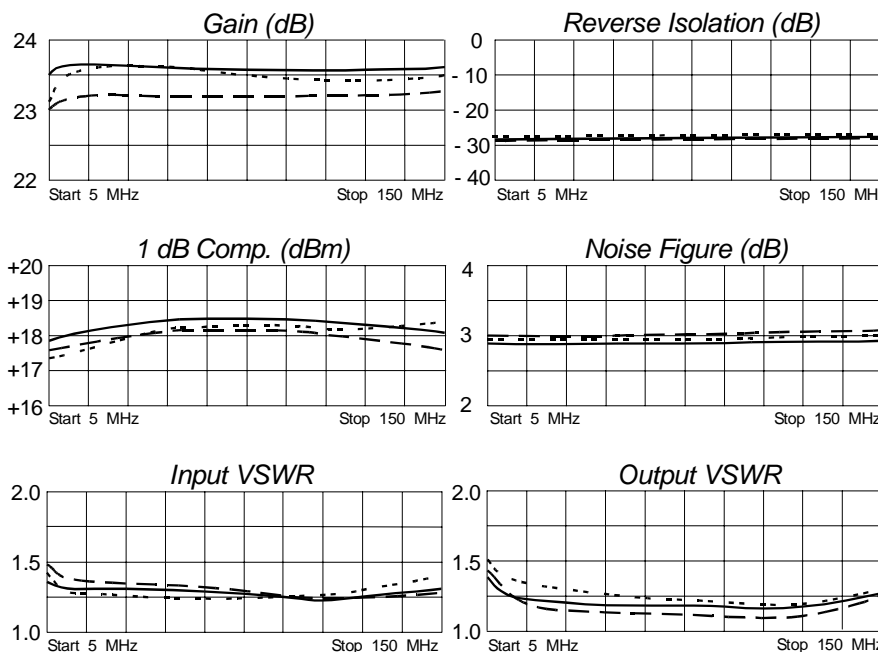
- High Gain: 23.5 dB Typical
- Low Noise Figure: <3 dB Typical
- Operating Temp. -55 °C to +85 °C
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	5 - 150 MHz	5 - 150 MHz
Gain (dB)	23.5	22.5 Min.
Power @ 1 dB Comp. (dBm)	+18	+17.0 Min.
Reverse Isolation (dB)	-29	-28 Max.
VSWR In	<1.5:1	2.0:1 Max.
VSWR Out	<1.5:1	2.0:1 Max.
Noise Figure (dB)	<3.0	3.2 Max.
Power Vdc	+15	+15
mA	35	38 Max.

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

Typical Performance Data



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

Typical Intermodulation Performance at 25 °C

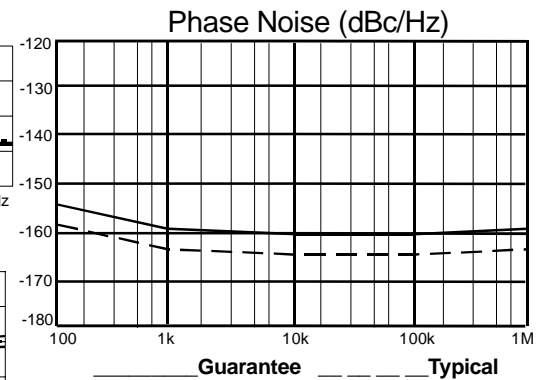
Second Order Harmonic Intercept Point +43 dBm (Typ.)
 Second Order Two Tone Intercept Point +37 dBm (Typ.)
 Third Order Two Tone Intercept Point +33 dBm (Typ.)

Maximum Ratings

Ambient Operating Temperature -55°C to +100 °C
 Storage Temperature -62°C to +125 °C
 Case Temperature +125 °C
 DC Voltage +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.)

Guaranteed Phase Noise Performance (dBc/Hz)

Frequency	Typical	Guarantee
100 Hz	-158	-154
1 kHz	-163	-159
10 kHz	-164	-160
100 kHz	-164	-160
1 MHz	-163	-159



- * **Residual Phase Noise Test Conditions**
 Carrier Frequency: 100 MHz
 Power Output: +18 dBm
 Temperature: 25 °C
 Agilent ES5500 System



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