

RF AMPLIFIER

MODEL *TM5171PM*

Available as: TM5171PM, 4 Pin TO-8 (T4)
 TN5171PM, 4 Pin Surface Mount (SM3)
 FP5171PM, 4 Pin Flatpack (FP4)
 BX5171PM, Connectorized Housing (H1)

Features

- Superior Phase Noise Performance
- High Output Power: +27 dBm Typical
- High IP3: +39 dBm Typical
- Operating Temp. -55 °C to +85 °C

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	20 - 150 MHz	20 - 150 MHz
Gain (dB)	13.5	13 Min.
Power @ 1 dB Comp. (dBm)	+27	+26 Min.
Reverse Isolation (dB)	-25	-24 Max.
VSWR In	1.5:1	1.6:1 Max.
VSWR Out	1.5:1	1.6:1 Max.
Noise Figure (dB)	6.5	7 Max.
Power Vdc	+15	+15
Power mA	105	110 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 +55 dBm (Typ.)
 Second Order Two Tone Intercept Point +50 dBm (Typ.)
 Third Order Two Tone Intercept Point +39 dBm (Typ.)

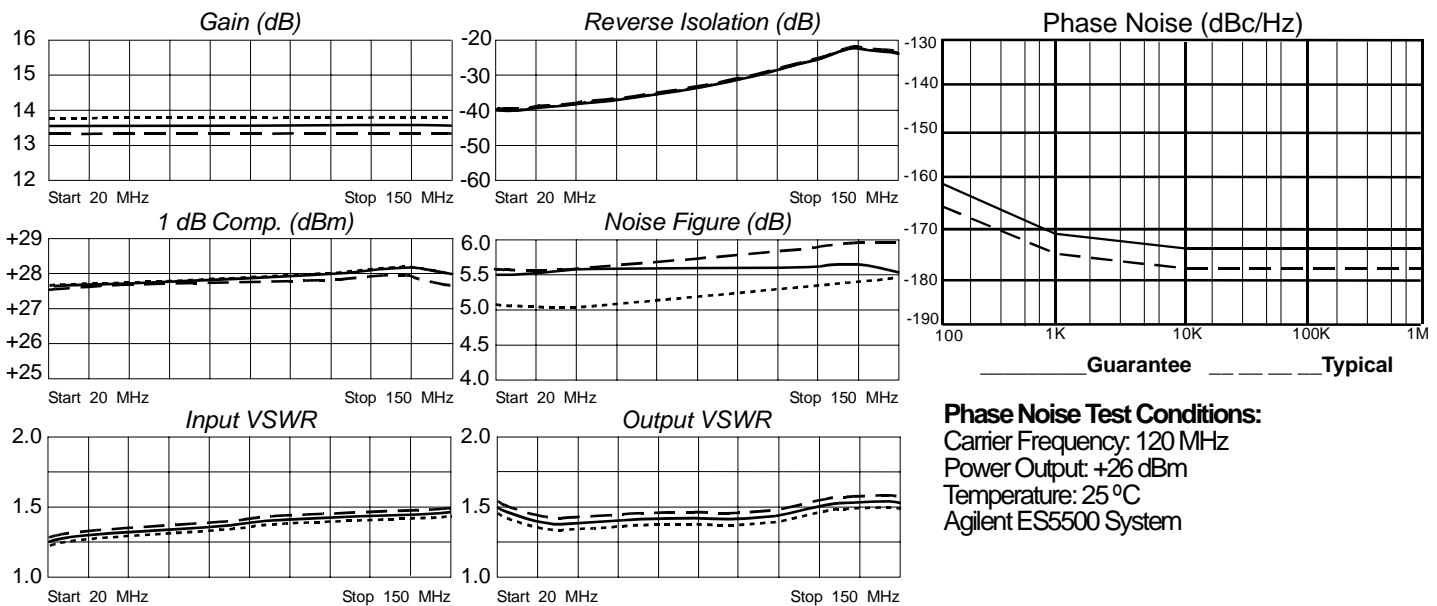
Maximum Ratings

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 +18 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	-166	-162
1 kHz	-175	-171
10 kHz	-178	-174
100 kHz	-178	-174
1 MHz	-178	-174

Typical Performance Data



Phase Noise Test Conditions:

Carrier Frequency: 120 MHz
 Power Output: +26 dBm
 Temperature: 25 °C
 Agilent ES5500 System

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

