

RF AMPLIFIER

MODEL *TM6513PM*

Available as: TM6513PM, 4 Pin TO-8 (T4)
 TN6513PM, 4 Pin Surface Mount (SM3)
 FP6513PM, 4 Pin Flatpack (FP4)
 BX6513PM, Connectorized Housing (H1)

Features

- Superior Low Phase Noise Performance
- 24 Volt Operation
- 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)	17	15.5 Min.
Power @ 1 dB Comp. (dBm)	+16.5	+15.0 Min.
Reverse Isolation (dB)	-19	-18 Max.
VSWR In	<1.5:1	2.0:1 Max.
VSWR Out	<1.75:1	2.0:1 Max.
Noise Figure (dB)	3.75	5.0 Max.
Power Vdc	+24	+24
mA	50	53 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.....+47 dBm (Typ.)
 Second Order Two Tone Intercept Point.....+41 dBm (Typ.)
 Third Order Two Tone Intercept Point.....+29 dBm (Typ.)

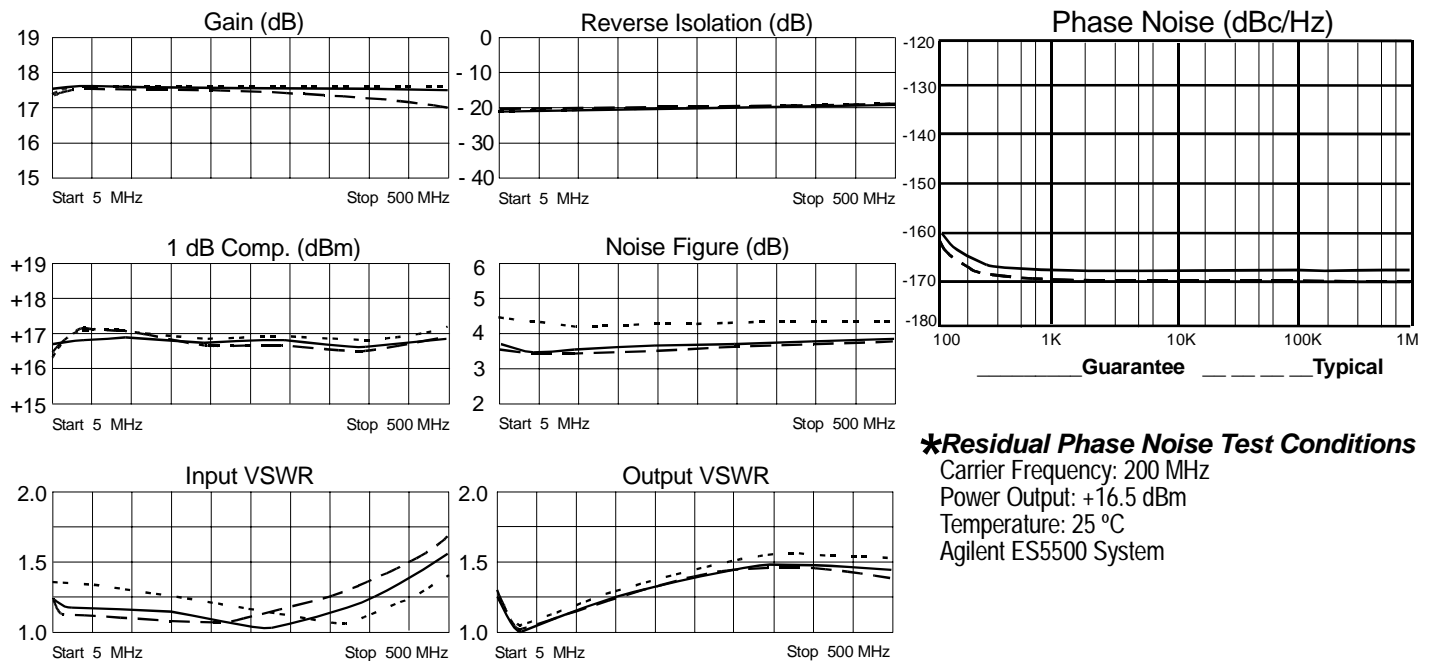
Maximum Ratings

Ambient Operating Temperature -55°C to +100 °C
 Storage Temperature -62°C to +125 °C
 Case Temperature +125 °C
 DC Voltage +26 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	Guaranteed
100 Hz	-163	-159
1 kHz	-170	-166
10 kHz	-170	-166
100 kHz	-170	-166
1 MHz	-170	-166

Typical Performance Data



*Residual Phase Noise Test Conditions

Carrier Frequency: 200 MHz
 Power Output: +16.5 dBm
 Temperature: 25 °C
 Agilent ES5500 System

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



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