

RF AMPLIFIER

MODEL *TM6131PM*

Available as: TM6131PM, 4 Pin TO-8 (T4)
 TN6131PM, 4 Pin Surface Mount (SM3)
 FP6131PM, 4 Pin Flatpack (FP4)
 BX6131PM, Connectorized Housing (H1)

Features

- High Third Order Intercept: +37 dBm Typical
- High Output Power: +20 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	10 - 500 MHz
Gain (dB)	10.3	9.0 Min.
Power @ 1 dB Comp. (dBm)	+20	+18.0 Min.
Reverse Isolation (dB)	-22	-20 Max.
VSWR In	1.25:1	2.0:1 Max.
VSWR Out	1.25:1	2.0:1 Max.
Noise Figure (dB)	4.5	6.5 Max.
Power Vdc	+15	+15
mA	62	70 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 +56 dBm (Typ.)
 Second Order Two Tone Intercept Point +50 dBm (Typ.)
 Third Order Two Tone Intercept Point +37 dBm (Typ.)

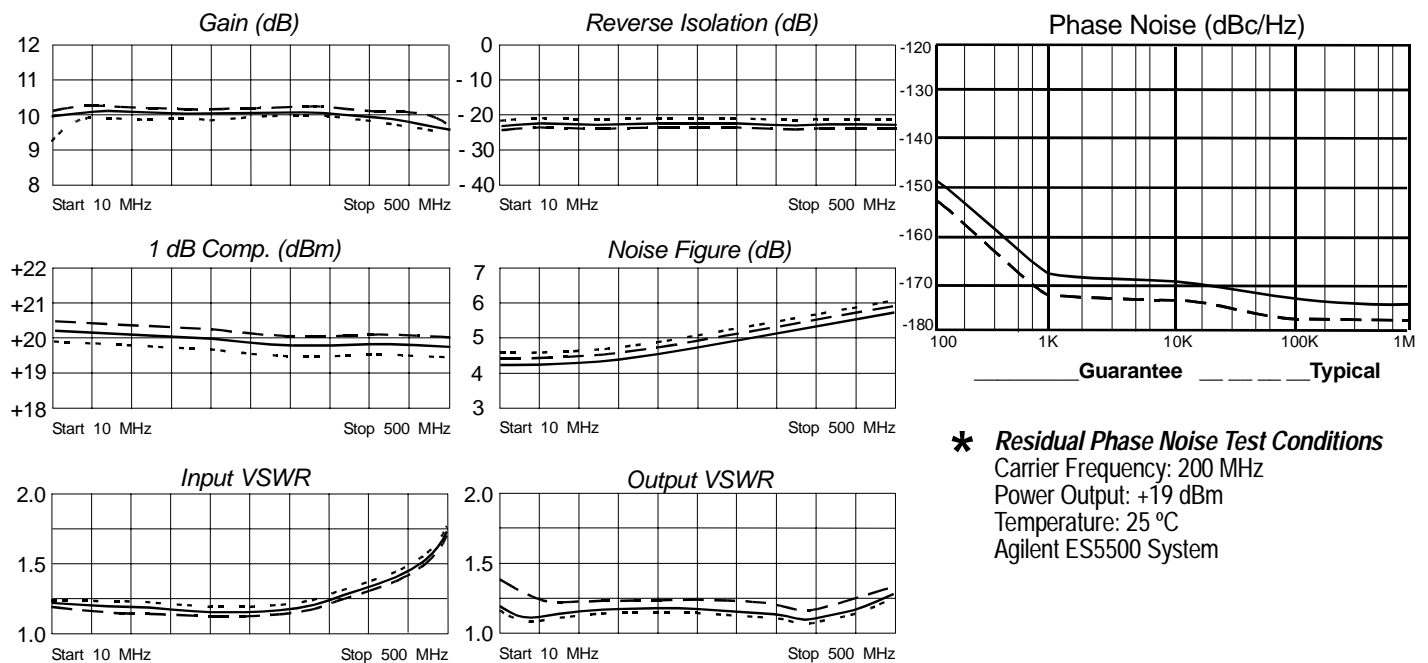
Maximum Ratings

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	-153	-149
1 kHz	-172	-168
10 kHz	-173	-169
100 kHz	-177	-173
1 MHz	-177	-173

Typical Performance Data



* **Residual Phase Noise Test Conditions**
 Carrier Frequency: 200 MHz
 Power Output: +19 dBm
 Temperature: 25 °C
 Agilent ES5500 System

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



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