RF AMPLIFIER
MODEL *TM3110PM*

Available as: TM3110PM, 4 Pin TO-8 (T4)
TN3110PM, 4 Pin Surface Mount (SM3)
BX3110PM, Connectorized Housing (H1)

Features

- Superior Phase Noise Performance
- High Output Power: +30 dBm Typical
- Operating Temp. -55 ºC to +85 ºC
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 ºC	MIN/MAX Ta = -55 ºC to +85 ºC
Frequency (MHz)	10 - 200 MHz	10 - 200 MHz
Gain (dB)	15.5	15 Min.
Power @ 1 dB Comp. (dBm)	+30	+29 Min.
Reverse Isolation (dB)	-17	-16 Max.
VSWR In Out	1.8:1 1.8:1	2.0:1 Max. 2.0:1 Max.
Noise Figure (dB)	3.5	4.5 Max.
Power Vdc mA	+15 240	+15 250 Max.

Note: Care should always be taken to effectively ground the case of each unit.
*Note: Phase Noise Performance typically tested at midband. Bandedge performance may vary.

Typical Intermodulation Performance at 25 ºC

Second Order Harmonic Intercept Point ..... +66 dBm (Typ.)
Second Order Two Tone Intercept Point ..... +63 dBm (Typ.)
Third Order Two Tone Intercept Point ..... +45 dBm (Typ.)

Absolute Maximum (No Damage) Ratings

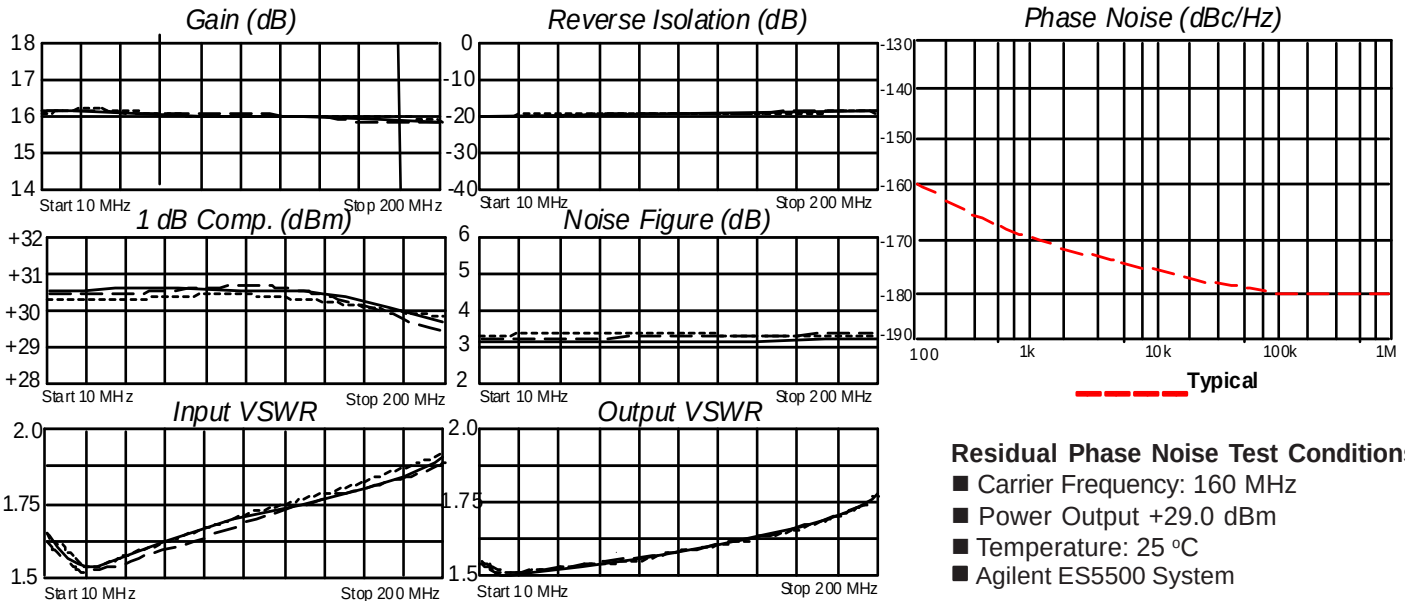
Ambient Operating Temperature .....-55ºC to +100 ºC
Storage Temperature .....-62ºC to +125 ºC
Case Temperature .....+125 ºC
DC Voltage ..... +17 Volts
Continuous RF Input Power ..... +15 dBm
Short Term RF Input Power ..... 100 mW (1 Minute Max.)
Maximum Peak Power ..... 0.2 Watt (3 µsec Max.)
Total Theta jc (TN3110PM).....+41ºC/Watt
Junction Temp Rise Above Case (TN3110PM)..... 36ºC

Frequency	Typical	Guarantee
100 Hz	-160	-155
1 kHz	-170	-165
10 kHz	-175	-170
100 kHz	-180	-175
1 MHz	-180	-175

Guaranteed @ 25 ºC (160 MHz) Phase Noise Performance (dBc/Hz)*

Note: Unit requires a 50 ohm termination at all times.

Typical Performance Data



Residual Phase Noise Test Conditions:

- Carrier Frequency: 160 MHz
- Power Output +29.0 dBm
- Temperature: 25 ºC
- Agilent ES5500 System

Legend ——— *+25 ºC* – – – *+85 ºC* - - - - - - *-55 ºC*

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Rev. 4/26/10

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