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

Typical Performance Data

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

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

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

Specifications

CHARACTERISTIC | TYPICAL | MIN/MAX
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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 | 1.8:1 | 2.0:1 Max.
VSWR Out | 1.8:1 | 2.0:1 Max.
Noise Figure (dB) | 3.5 | 4.5 Max.
Power Vdc | +15 | +15
mA | 240 | 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.

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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