

# RF AMPLIFIER

## MODEL *TM3100*

Available as: TM3100, 4 Pin TO-8 (T4)  
 TN3100, 4 Pin Surface Mount (SM3)  
 FP3100, Pin Flatpack (FP4)  
 BX3100, Connectorized Housing (H1)

### Features

- High Gain: +30 dB Typical
- Low Noise Figure: 3.5 dB 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	500 - 1300 MHz	500 - 1300 MHz
Gain (dB)	30	29 Min.
Power @ 1 dB Comp. (dBm)	+16	+14 Min.
Reverse Isolation (dB)	-40	-35 Max.
VSWR In	1.8:1	2.0:1 Max.
Out	1.8:1	2.0:1 Max.
Noise Figure (dB)	3.5	4.5 Max.
Power Vdc	+15	+15
mA	80	90 Max.

Note: Care should always be taken to effectively ground the case of each unit.

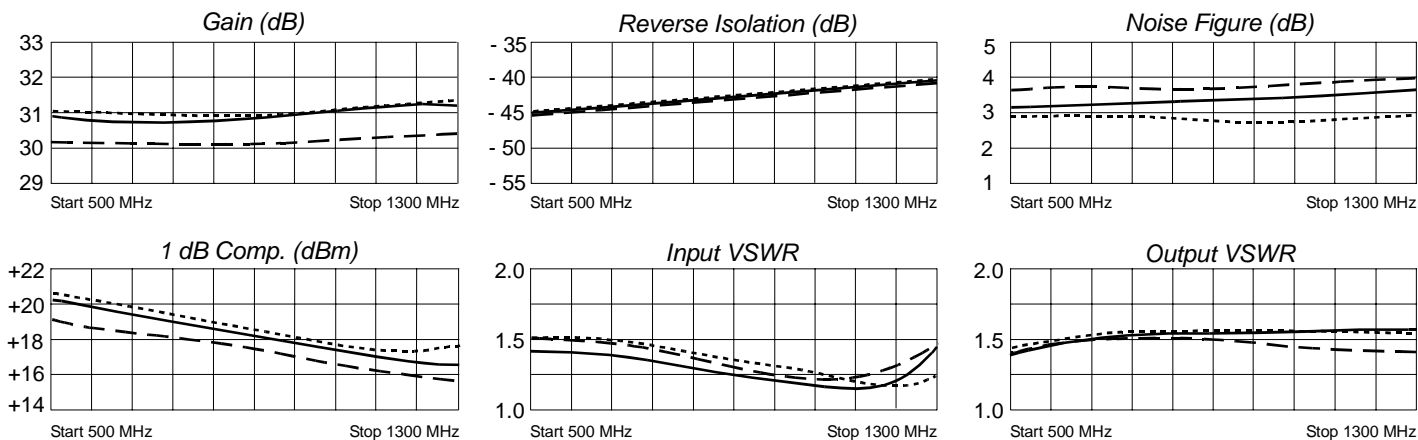
### Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point ..... +43 dBm (Typ.)  
 Second Order Two Tone Intercept Point ..... +38 dBm (Typ.)  
 Third Order Two Tone Intercept Point ..... +28 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 ..... + 10 dBm  
 Short Term RF Input Power ..... 50 Milliwatts (1 Minute Max.)  
 Maximum Peak Power ..... 0.5 Watt (3 µsec Max.)

### Typical Performance Data



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



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