

# RF AMPLIFIER

## MODEL *TM3101*

Available as: TM3101, 4 Pin TO-8 (T4)  
 TN3101, 4 Pin .450" Sq. Surface Mount (SM3)  
 BX3101, SMA Connectorized Housing (H1)

### Features

- High Gain: 30 dB Typical
- Low Noise Figure: 1.8 dB Typical
- Operating Temp. -55 °C to + 85 °C
- Screening to the Tables of MIL-STD-883 Available

### Specifications

CHARACTERISTIC	TYPICAL Ta = 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	1200 - 1700 MHz	1200 - 1700 MHz
Gain (dB)	30	28.5 Min.
Power @ 1 dB Comp. (dBm)	+20	+19 Min.
Reverse Isolation (dB)	-37	-33 Max.
VSWR In	1.75:1	2.2:1 Max.
Out	1.75:1	2.2:1 Max.
Noise Figure (dB)	1.8	2.5 Max.
Power Vdc	+5	+5 Min.
mA	105	115 Max.

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

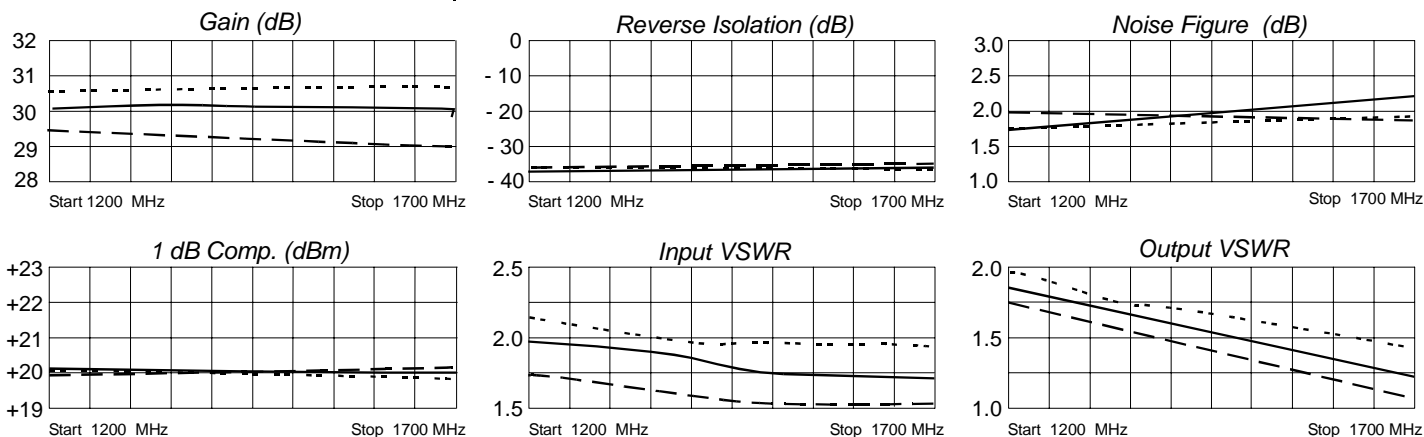
### Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point..... +45 dBm (Typ.)  
 Second Order Two Tone Intercept Point..... +40 dBm (Typ.)  
 Third Order Two Tone Intercept Point..... +30 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 ..... + 8 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.)

### Typical Performance Data



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

