

# RF AMPLIFIER

## MODEL *TM3031*

Available as: TM3031, 4 Pin TO-8 (T4)  
 TN3031, 4 Pin 0.450" Surface Mount (SM3)  
 FP3031, 4 Pin 0.500" Flatpack (FP4)  
 BX3031, SMA Connectorized Housing (H1)

### Features

- Low 3.3 Volt Operation
- Low Noise Figure: 2.2 dB Typical
- Environmental Screening Available

### Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -10 °C to +60 °C
Frequency	100 - 500 MHz	100 - 500 MHz
Gain (dB)	13	12.5 Min.
Power @ 1 dB Comp. (dBm)	+8.5	+7.0 Min.
Reverse Isolation (dB)	-19	-18.0 Max.
VSWR In	1.85:1	2.0:1 Max.
Out	1.75:1	2.0:1 Max.
Noise Figure (dB)	2.2	2.5 Max.
VSWR Vdc	+3.3	+3.3 Min.
mA	30	35 Max.

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

### Typical Intermodulation Performance at 25 °C

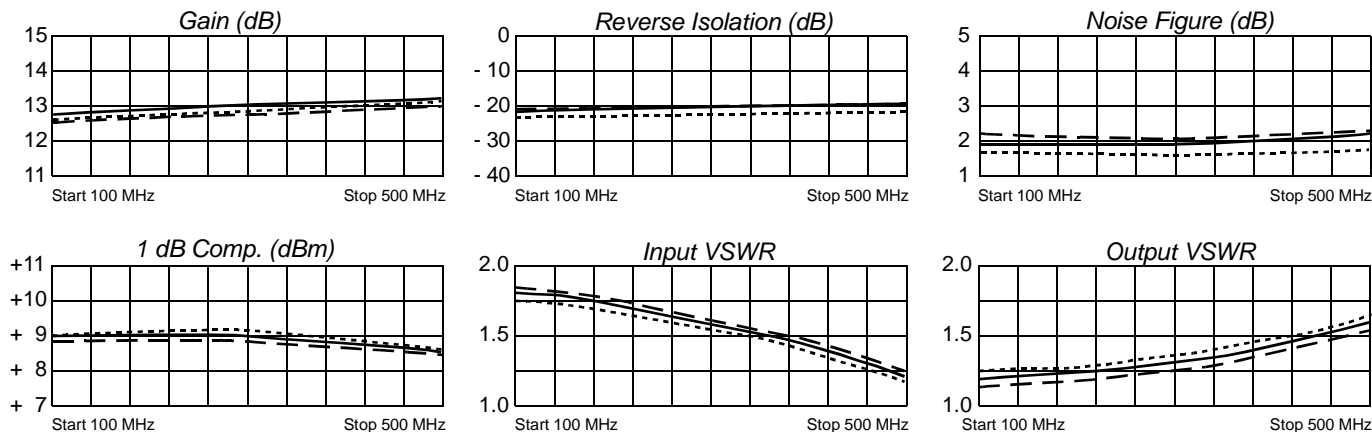
Second Order Harmonic Intercept Point ..... +35 dBm (Typ.)  
 Second Order Two Tone Intercept Point ..... +29 dBm (Typ.)  
 Third Order Two Tone Intercept Point ..... +20 dBm (Typ.)

### Absolute Maximum (No Damage) 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 ..... + 6 dBm  
 Short Term RF Input Power ..... 20 Milliwatts (1 Minute Max.)  
 Maximum Peak Power ..... 0.1 Watt (3 μsec Max.)

Revision 11/28/2012

### Typical Performance Data



Legend ——— + 25 °C - - - - + 60 °C ······ -10 °C



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