

# RF AMPLIFIER

## MODEL *TM3080*

Available as: TM3080, 4 Pin TO-8 (T4)  
 TN3080, 4 Pin Surface Mount (SM3)  
 BX3080, SMA Connectorized Housing (H1)

### Features

- Low +5 Volt Supply
- Wide 100-3000 MHz Bandwidth
- Environmental Screening Available

### Specifications

| CHARACTERISTIC                                | TYPICAL<br>Ta= 25 °C | MIN/MAX<br>Ta = -55 °C to +85 °C |
|-----------------------------------------------|----------------------|----------------------------------|
| Frequency (MHz)                               | 100-3000 MHz         | 100-3000 MHz                     |
| Gain (dB)                                     | 20                   | 18 Min.                          |
| Power @ 1 dB (<2000 MHz)<br>Comp. (>2000 MHz) | 19<br>15             | 18 Min.<br>14 Min.               |
| Reverse Isolation (dB)                        | -37                  | -35 Max.                         |
| VSWR In<br>Out                                | 2.20:1<br>2.20:1     | 2.5:1 Max.<br>2.5:1 Max.         |
| Noise Figure (dB)                             | 5.0                  | 7.0 Max.                         |
| Power Vdc<br>mA                               | +5<br>95             | +5<br>100 Max.                   |

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

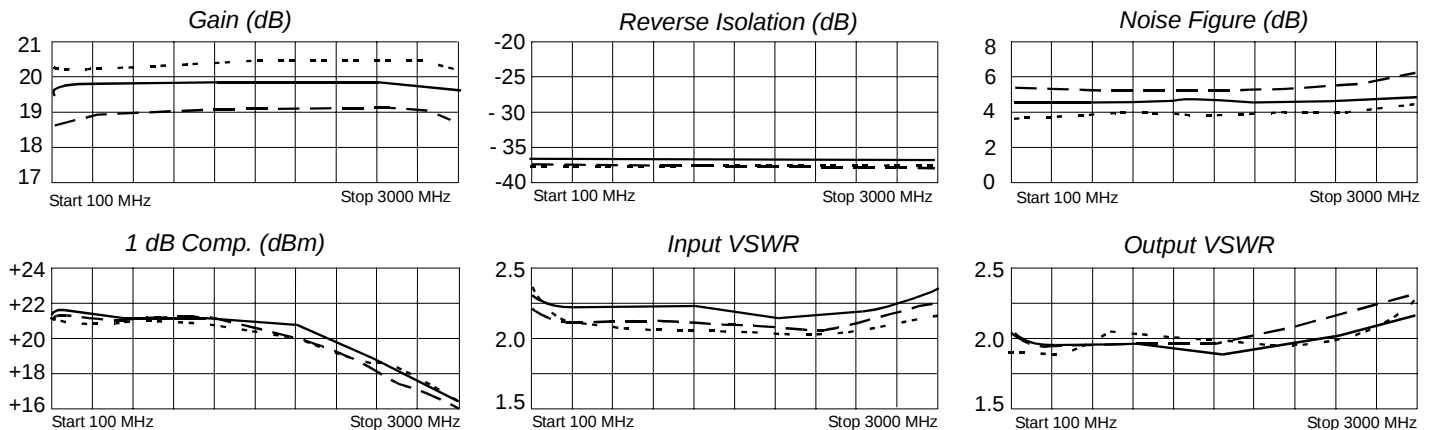
### Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point ..... +47 dBm (Typ.)  
 Second Order Two Tone Intercept Point ..... +42 dBm (Typ.)  
 Third Order Two Tone Intercept Point ..... +34 dBm (Typ.)

### Maximum Ratings

Ambient Operating Temperature ..... -55°C to +100 °C  
 Storage Temperature ..... -69°C to +125 °C  
 Case Temperature ..... +125 °C  
 DC Voltage ..... +8 Volts  
 Continuous RF Input Power ..... +13 dBm  
 Short Term RF Input Power ..... 20 Milliwatts (1 Minute Max.)  
 Maximum Peak Power ..... 0.2 Watt (3 µsec Max.)

### Typical Performance Data



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