

# RF AMPLIFIER

## MODEL *TM3007*

Available as: TM3007, 4 Pin TO-8 (T4)  
 TN3007, 4 Pin Surface Mount (SM3)  
 FP3007, 4 Pin Flatpack (FP4)  
 BX3007, Connectorized Housing (H1)

### Features

- Low Noise Figure: <2.7 dB Typical
- Output Power: +14 dBm Typical
- Operating Temp. - 55 °C to + 85 °C
- Environmental Screening Available

### Specifications

| CHARACTERISTIC              | TYPICAL<br>Ta= 25 °C | MIN/MAX<br>Ta = -55 °C to +85 °C |
|-----------------------------|----------------------|----------------------------------|
| Frequency                   | 50 - 700 MHz         | 50 - 700 MHz                     |
| Gain (dB)                   | 14.5                 | 13 Min.                          |
| Power @ 1 dB<br>Comp. (dBm) | +14                  | +13 Min.                         |
| Reverse<br>Isolation (dB)   | -19.5                | -18 Max.                         |
| VSWR In                     | <1.75:1              | 2:0:1 Max.                       |
| Out                         | <1.5:1               | 2:0:1 Max.                       |
| Noise Figure (dB)           | <2.7                 | 3.0 Max.                         |
| Power Vdc                   | +15                  | +15                              |
| mA                          | 27                   | 30 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 ..... +40 dBm (Typ.)  
 Second Order Two Tone Intercept Point ..... +36 dBm (Typ.)  
 Third Order Two Tone Intercept Point ..... +26 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 ..... + 13 dBm  
 Short Term RF Input Power ..... 50 Milliwatts (1 Minute Max.)  
 Maximum Peak Power ..... 0.5 Watt (3 µsec Max.)

### Typical Performance Data

