

# RF AMPLIFIER

## MODEL *TM3019*

Available as: TM3019, 4 Pin TO-8 (T4)  
 TN3019, 4 Pin Surface Mount (SM3)  
 BX3019, Connectorized Housing (H1)

### Features

- GaAs FET Amplifier
- High Output Power: +22 dBm Typical
- Operating Temp. - 30 °C to + 71 °C
- Environmental Screening Available

### Specifications

| CHARACTERISTIC              | TYPICAL<br>Ta= 25 °C | MIN/MAX<br>Ta = -30 °C to +71 °C |
|-----------------------------|----------------------|----------------------------------|
| Frequency                   | 500 - 1300 MHz       | 500 - 1300 MHz                   |
| Gain (dB)                   | 13.5                 | 12.5 Min.                        |
| Power @ 1 dB<br>Comp. (dBm) | +22                  | +21 Min.                         |
| Reverse<br>Isolation (dB)   | -21.5                | -20 Max.                         |
| VSWR In                     | <1.75:1              | 2.2:1 Max.                       |
| Out                         | <1.5:1               | 2.0:1 Max.                       |
| Noise Figure (dB)           | 2.2                  | 3.0 Max.                         |
| Power Vdc                   | +15                  | +15                              |
| mA                          | 105                  | 110 Max.                         |

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

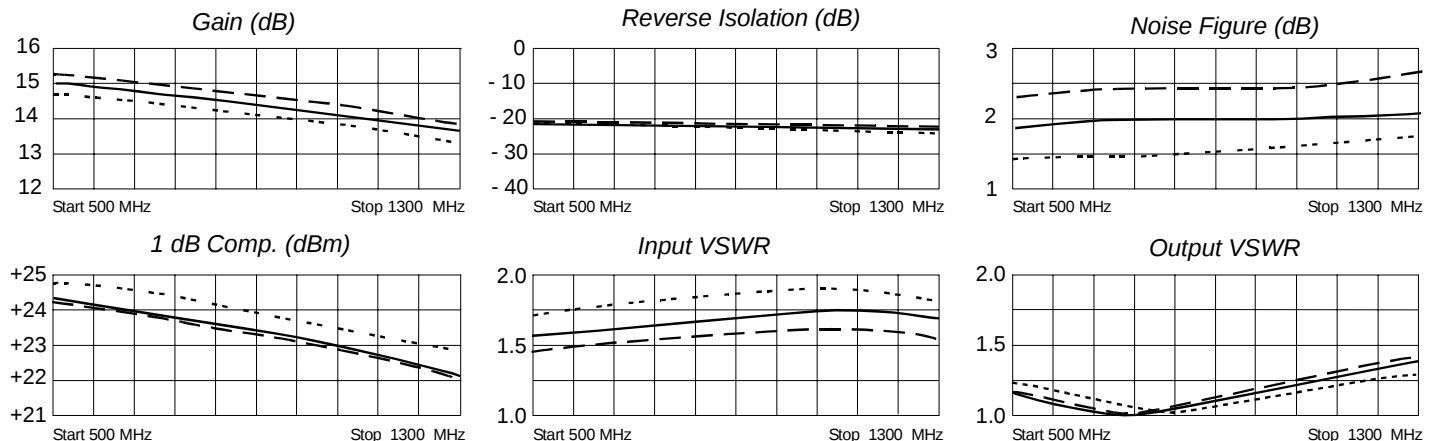
### Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point ..... +55 dBm (Typ.)  
 Second Order Two Tone Intercept Point ..... +50 dBm (Typ.)  
 Third Order Two Tone Intercept Point ..... +36 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 ..... + 20 dBm  
 Short Term RF Input Power .... 200 Milliwatts (1 Minute Max.)  
 Maximum Peak Power ..... 0.5 Watt (3 µsec Max.)

### Typical Performance Data



Legend ——— + 25 °C - - - - + 71 °C . . . . . -30 °C



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 05/12/04

www.spectrummicrowave.com Spectrum Microwave (Europe) · 2707 Black Lake Place · Philadelphia, Pa. 19154 · PH (215) 464-4000 · Fax (215) 464-4001