

# RF AMPLIFIER

## MODEL *TM3099*

Available as: TM3099, 4 Pin TO-8 (T4)  
 TN3099, 4 Pin Surface Mount (SM3)  
 BX3099, Connectorized Housing (H1)

### Features

- Low Noise Figure: 1.4 dB Typical
- Low 5 Volt Supply
- Operating Temp. - 55 °C to +85 °C
- Environmental Screening Available

### Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	200 - 800 MHz	200 - 800 MHz
Gain (dB)	15	14 Min.
Power @ 1 dB Comp. (dBm)	+15.0	+13.0 Min.
Reverse Isolation (dB)	-17	-16 Max.
VSWR In	2.0:1	2.5:1 Max.
Out	1.5:1	2.0:1 Max.
Noise Figure (dB)	1.4	1.8 Max.
Power Vdc	+5	+5
mA	70	80 Max.

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

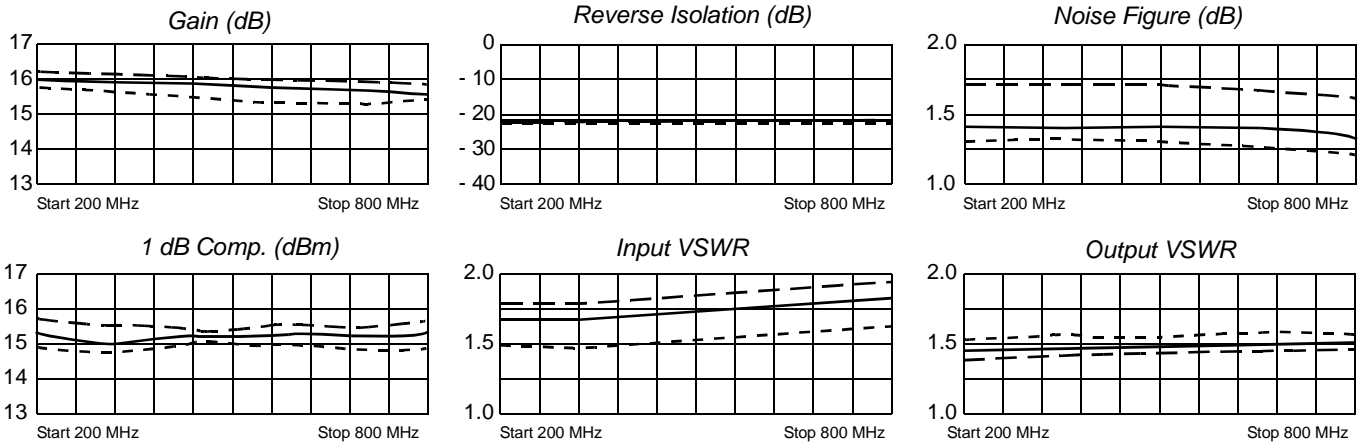
### Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point.... +40 dBm (Typ.)  
 Second Order Two Tone Intercept Point.... +35 dBm (Typ.)  
 Third Order Two Tone Intercept Point..... +25 dBm (Typ.)

### Maximum Ratings

Ambient Operating Temperature ..... -55°C to + 100 °C  
 Storage Temperature ..... -62°C to + 125 °C  
 Case Temperature ..... + 95 °C  
 DC Voltage ..... + 8 Volts  
 Continuous RF Input Power ..... + 15 dBm  
 Short Term RF Input Power.... 100 Milliwatts (1 Minute Max.)  
 Maximum Peak Power..... 0.2 Watt (3 μsec Max.)

### Typical Performance Data



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



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 05/24/04

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