

# RF AMPLIFIER

## MODEL TN3097

Available as: TM3097, 4 Pin TO-8 (T4)  
 TN3097, 4 Pin Surface Mount (SM3)  
 FP3097, 4 Pin Flatpack (FP4)  
 BX3097, Connectorized Housing (H1)

### Features

- High Output Power: 27.5 dBm Typical
- Low Phase Bipolar Design
- 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	10 - 300 MHz	10 - 300 MHz
Gain (dB)	13.5	13 Min.
Power @ 1 dB Comp. (dBm)	+27.5	+27 Min.
Reverse Isolation (dB)	-17	-16 Max.
VSWR In	1.5:1	2.0:1 Max.
Out	1.5:1	2.0:1 Max.
Noise Figure (dB)	5.0	6.0 Max.
Power Vdc	+12	+12
mA	180	185 Max.

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

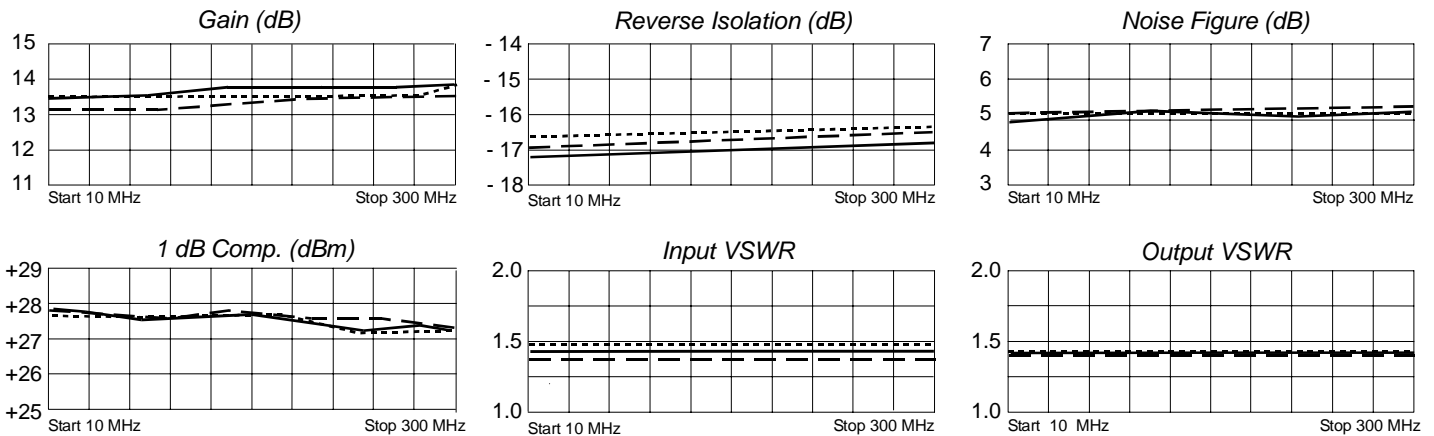
### Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point ..... +60 dBm (Typ.)  
 Second Order Two Tone Intercept Point ..... +55 dBm (Typ.)  
 Third Order Two Tone Intercept Point ..... +44 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 ..... + 15 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 12/11/06

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