

# RF AMPLIFIER

## MODEL *TM3089*

Available as: TM3089, 4 Pin TO-8 (T4)  
 TN3089, 4 Pin Surface Mount (SM3)  
 FP3089, 4 Pin Flatpack (FP4)  
 BX3089, Connectorized Housing (H1)

### Features

- Higher Output Power: +24.5 dBm Typical
- Superior Phase Noise Performance
- 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 - 160 MHz	10 - 160 MHz
Gain (dB)	20	19 Min.
Power @ 1 dB Comp. (dBm)	24.5	23 Min.
Reverse Isolation (dB)	-22	-21 Max.
VSWR In	1.8:1	2.1:1 Max.
Out	1.8:1	2.0:1 Max.
Noise Figure (dB)	2.5	3.0 Max.
Power Vdc	+15	+15
mA	110	120 Max.

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

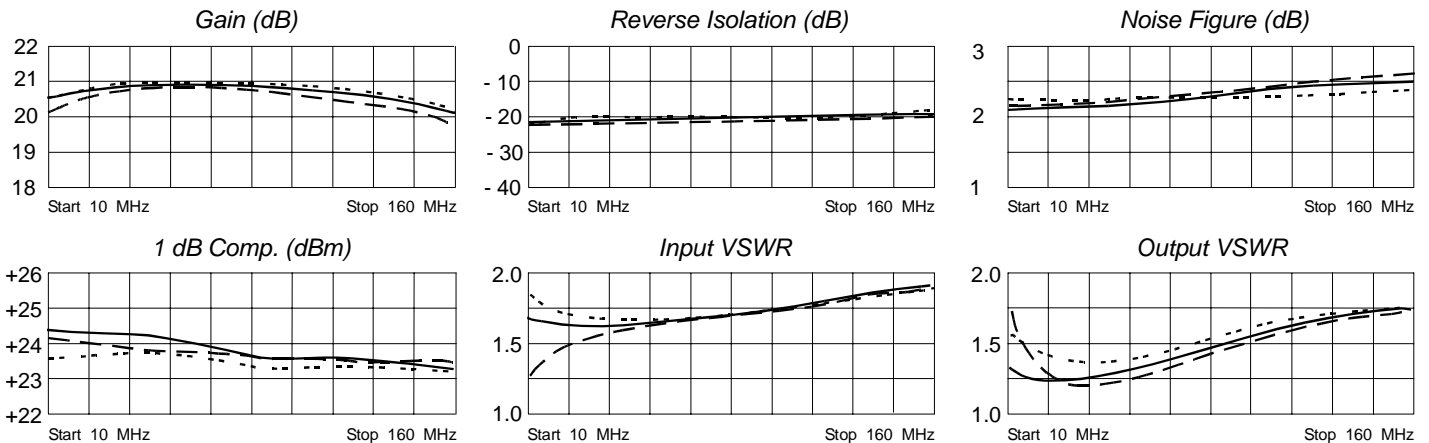
### Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point ..... +58 dBm (Typ.)  
 Second Order Two Tone Intercept Point ..... +52 dBm (Typ.)  
 Third Order Two Tone Intercept Point ..... +40 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



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 01/27/05

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