

# RF AMPLIFIER

## MODEL TR9869

Available as: TR9869, 4 Pin TO-8B (T8)  
 RN9869, 4 Pin Surface Mount (SM19)  
 BR9869, Connectorized Housing (H2)

### Features

- High Output Power: +27.5 dBm Typical
- High Gain: 18 dB Typical
- 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 (MHz)	50 - 3200 MHz	100 - 3000 MHz
Gain (dB)	18	17 Min.
Gain Flatness (dB)	+/- 0.4	+/- 0.8 Max.
Power @ 1 dB Comp. (dBm)	+27.5	+26.5 Min.
Reverse Isolation (dB)	35	---
VSWR In	1.6:1	1.9:1 Max.
Out	1.6:1	1.9:1 Max.
Noise Figure (dB) (500-3000 MHz)	5.2*	6.5* Max.
Power Vdc	+15	+15
mA	270	300 Max.

\* 2.0 dB higher 100-500 MHz

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

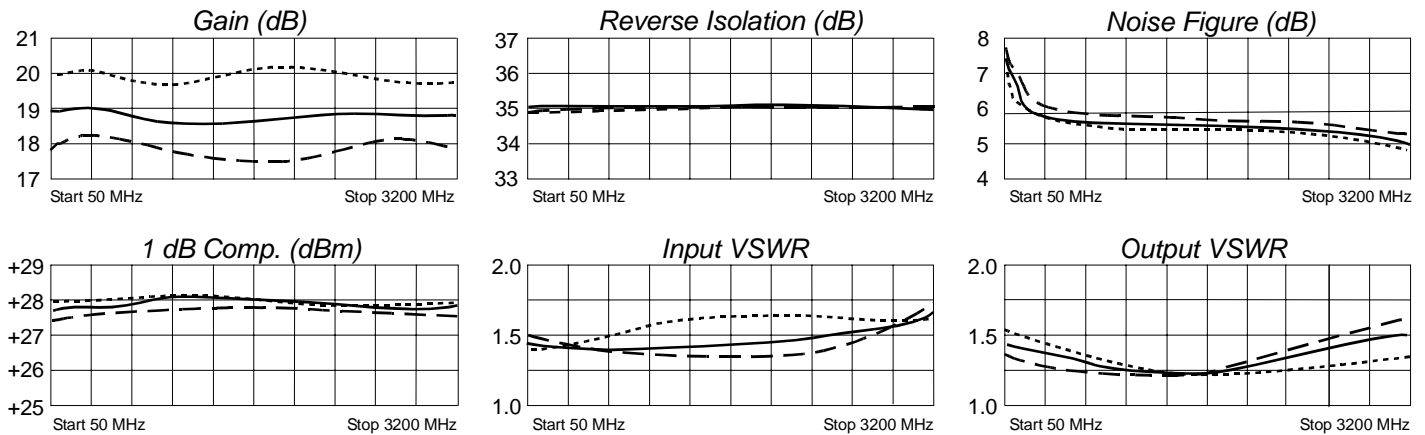
### Typical Intermodulation Performance at 25 °C\*

Second Order Harmonic Intercept Point ..... +60 dBm (Typ.)  
 Second Order Two Tone Intercept Point ..... +55 dBm (Typ.)  
 Third Order Two Tone Intercept Point ..... +40 dBm (Typ.)  
 \*Measured at 1000 MHz.

### Maximum Ratings

Ambient Operating Temperature ..... -55°C to +100 °C  
 Storage Temperature ..... -62°C to +125 °C  
 Case Temperature ..... +125 °C  
 DC Voltage ..... +17 Volts  
 Continuous RF Input Power ..... +17 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    Rev. 12/15/08

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