

# RF AMPLIFIER

## MODEL TR9036

Available as: TR9036, 4 Pin TO-8B (T8)  
 RN9036, 4 Pin Surface Mount (SM19)  
 BR9036, Connectorized Housing (H2)

Preliminary

### Features

- High Gain: 26.5 dB Typical
- Medium Output Power: +14.5 dBm 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	5 - 2100 MHz	10 - 2000 MHz
Gain (dB)	26.5	24 Min.
Gain Flatness (dB)	±0.8	±1.4 Max.
Power @ 1 dB Comp. (dBm)	+14.5	+13 Min.
Reverse Isolation (dB)	-45	-35 Max.
VSWR In	<1.7:1	2.0:1 Max.
VSWR Out	<1.7:1	2.0:1 Max.
Noise Figure (dB)	5.5	7.0 Max.
Power Vdc	+15	+15
mA	81	89 Max.

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

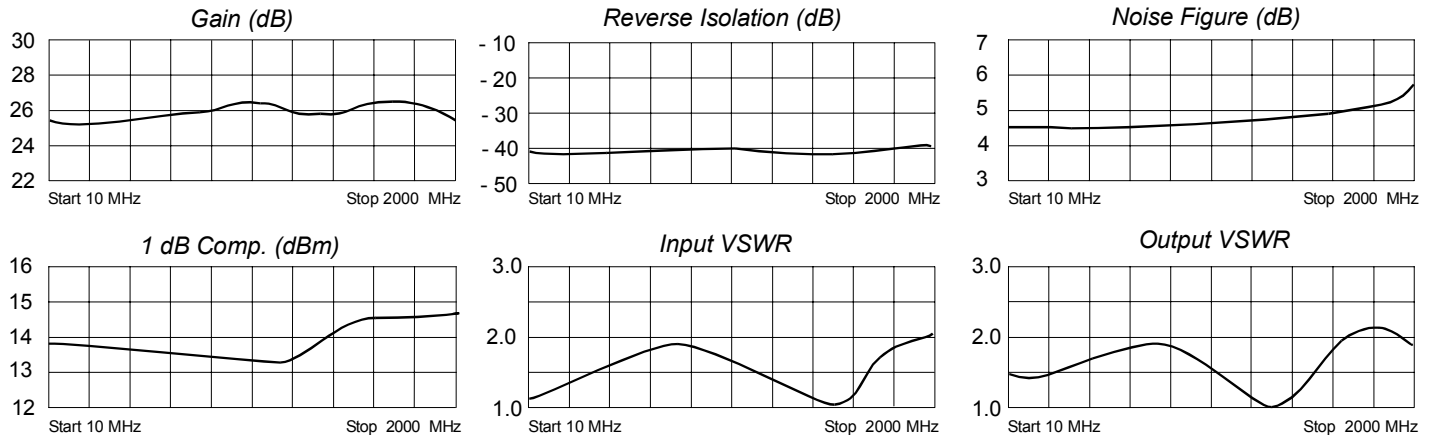
### Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point.... +49 dBm (Typ.)  
 Second Order Two Tone Intercept Point.... +43 dBm (Typ.)  
 Third Order Two Tone Intercept Point..... +27.5 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 ..... +17 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

Rev.  
1/22/09

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