

# RF AMPLIFIER

## MODEL *TM9309*

Available as: TM9309, 4 Pin TO8 (T4)  
 TN9309, 4 Pin Surface Mount (SM3)  
 BX9309, Connectorized Housing (H1)

Preliminary

### Features

- Broad Bandwidth: 20 to 3000 MHz
- High Output Power: +26.0 dBm Typical
- High Third Order Intercept Point: +40 dBm Typical
- Environmental Screening Available

### Specifications

CHARACTERISTIC	TYPICAL Ta = 25 °C	MIN/MAX Ta = -40 °C to +70 °C
Frequency	20 - 3000 MHz	20 - 3000 MHz
Gain (dB)	10.0	9.0 Min.
Gain Flatness	±0.5	±0.8 Max.
Power @ 1 dB Comp.	+26.0	+25.0 Min.
Reverse Isolation (dB)	-20	-15 Max.
VSWR In	1.8:1	2.0:1 Max.
Out	1.8:1	2.0:1 Max.
Noise Figure (dB)*	9.5	6.0 Max.
Power Vdc	+15	+15
mA	190	210 Max.

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

\* Noise Figure starts from 100 MHz.

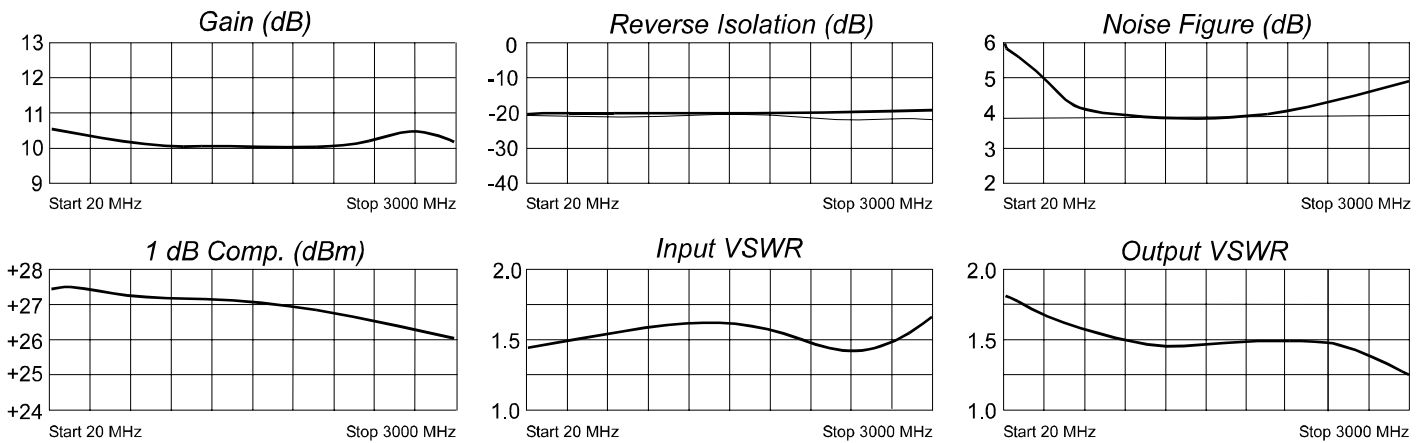
### Typical Intermodulation Performance at 25 °C

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.)

### 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 ..... +20 dBm  
 Short Term RF Input Power .... 200 Milliwatts (1 Minute Max.)  
 Maximum Peak Power ..... 0.2 Watt (3 µsec Max.)

### Typical Performance Data



Legend ——— +25 °C



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