

# RF AMPLIFIER

## MODEL *TM9738*

Available as: TM9738, 4 Pin TO-8 (T4)  
 TN9738, 4 Pin Surface Mount (SM3)  
 FP9738, 4 Pin Flatpack (FP4)  
 BX9738, Connectorized Housing (H1)  
 PN9738, Reduced Size Surface Mount (SM11)

### Features

- High Output Power : +25 dBm Typical
- High Third Order Intercept: +39 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	200 - 2000 MHz	200 - 2000 MHz
Gain (dB)	11	9 Min.
Power @ 1 dB Comp. (dBm)	+25.5	+24.0 Min.
Reverse Isolation (dB)	-19	-17 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.5:1	2.0:1 Max.
Noise figure (dB)	<4.0	5.2 Max.
Power Vdc	+15	+15
mA	140	160 Max.

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

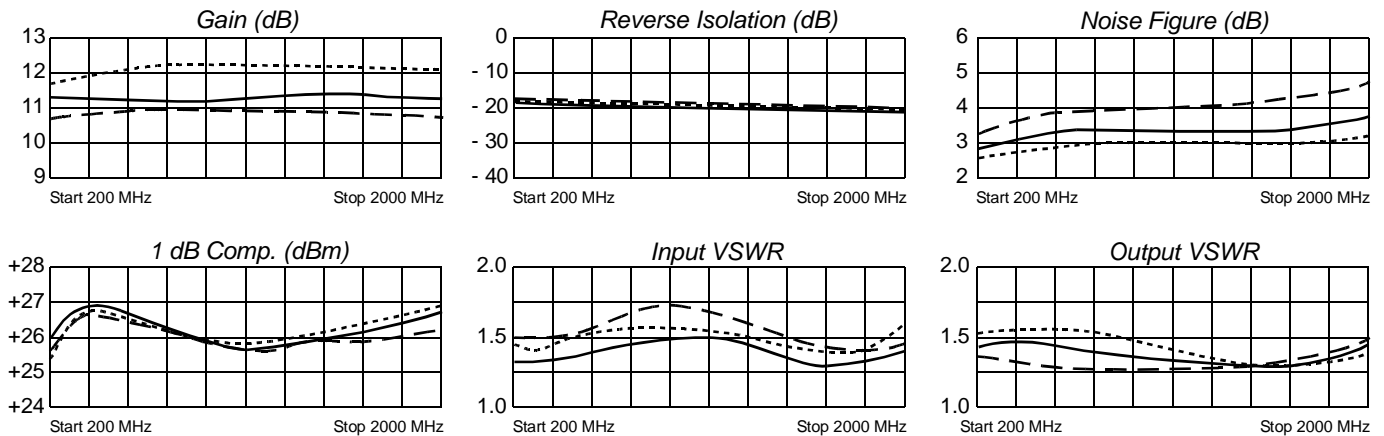
### Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point ..... +52 (Typ.)  
 Second Order Two Tone Intercept Point ..... +46 (Typ.)  
 Third Order Two Tone Intercept Point ..... +39 (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 ..... 0.5 Watt (3 μsec Max.)

### Typical Performance Data



Legend ——— + 25 °C    - - - - + 85 °C    ······ -55 °C



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