

# RF AMPLIFIER

## MODEL *TM9769*

Available as: TM9769, 4 Pin TO-8 (T4)  
 TN9769, 4 Pin Surface Mount (SM3)  
 FP9769, 4 Pin Flatpack (FP4)  
 BX9769, Connectorized Housing (H1)

### Features

- Higher Output Power: +23 dBm Typical
- Low Noise Figure: <2.5 dB Typical
- Operating Temp. - 55 °C to +85 °C

### Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	10 -1400 MHz	10 - 1300 MHz
Gain (dB)	12.5	11.5 Min.
Gain Flatness (dB)	+/- 0.2	+/- 0.5 Max.
Power @ 1 dB Comp. (dBm)	+23	+21.5 Min.
Reverse Isolation (dB)	-20	-18 Max.
VSWR In	<1.5:1 <sup>^</sup>	1.9:1 Max. <sup>^</sup>
Out	<1.7:1	2.0:1 Max.
Noise Figure (dB)	<2.5	3.5 Max.
Power Vdc	+15	+15 Min.
mA	100	110 Max.

### Typical Intermodulation Performance at 25 °C

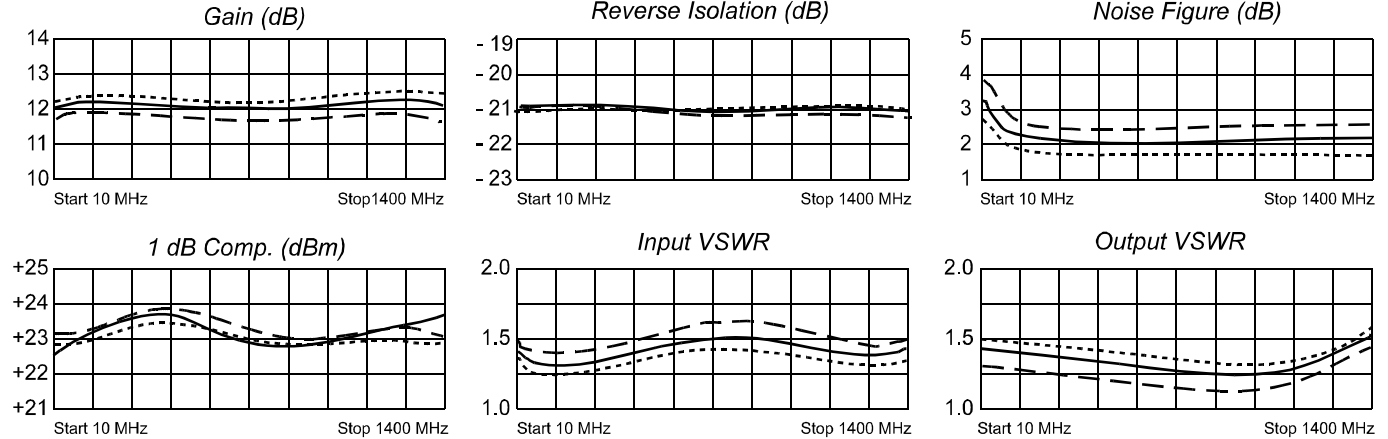
Second Order Harmonic Intercept Point ..... +54 dBm (Typ.)  
 Second Order Two Tone Intercept Point ..... +49 dBm (Typ.)  
 Third Order Two Tone Intercept Point ..... +36 dBm (Typ.)

### 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 ..... +20 dBm  
 Short Term RF Input Power .... 250 Milliwatts (1 Minute Max.)  
 Maximum Peak Power ..... 0.5 Watt (3 µsec Max.)

Note: Care should always be taken to effectively ground the case of each unit.  
<sup>^</sup>0.3 higher at 10 MHz

### Typical Performance Data



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

