

RF AMPLIFIER

MODEL *TM9748*

Available as: TM9748, 4 Pin TO-8 (T4)
 TN9748, 4 Pin Surface Mount (SM3)
 FP9748, 4 Pin Flatpack (FP4)
 BX9748, Connectorized Housing (H1)

Preliminary

Features

- Wide Bandwidth: 5 to 2500 MHz Typical
- High Third Order Intercept: +30 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 - 2500 MHz	10 - 2300 MHz
Gain (dB)	9.0	8.0 Min.
Gain Flatness (dB)	±0.25	±0.8 Max.
Power @ 1 dB Comp. (dBm)	>+18	+17.0 Min.
Reverse Isolation (dB)	-12.5	-11.5 Max.
VSWR In	1.5:1	2.0:1 Max.
Out	<1.3:1	2.0:1 Max.
Noise Figure (dB)*	4.0	5.3 Max.
Power Vdc	+15	+15
mA	66	75 Max.

Note: Care should always be taken to effectively ground the case of each unit.
 *Noise Figure measured from 200 to 2300 MHz.

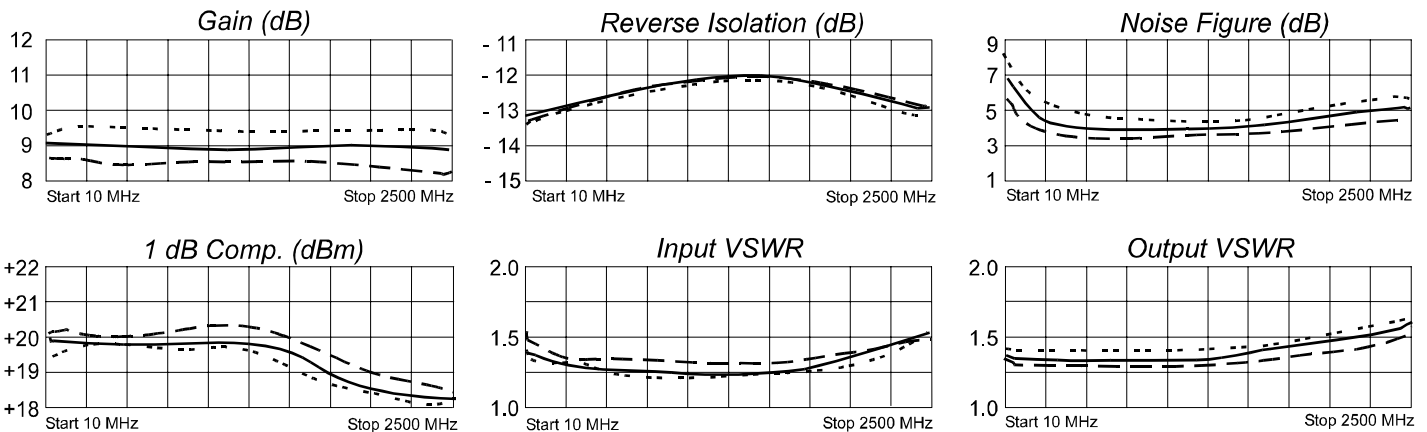
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +46 dBm (Typ.)
 Second Order Two Tone Intercept Point +40 dBm (Typ.)
 Third Order Two Tone Intercept Point +30 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



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