

RF AMPLIFIER

MODEL *TM9759*

Available as: TM9759, 4 Pin TO-8 (T4)
 TN9759, 4 Pin 0.450" Sq. Surface Mount (SM3)
 FP9759, 4 Pin Flatpack (FP4)
 BX9759, Connectorized Housing (H1)

Preliminary

Features

- High Output Power: +27.5 dB Typical
- High Second Order Harmonics: +69 dBm Typical (+12V)
- High Third Order Intercept: +39 dBm Typical

Specifications

| CHARACTERISTIC | TYPICAL Ta= 25 °C | MIN/MAX Ta = -55 °C to +85 °C |
|-----------------------------------|----------------------|----------------------------------|
| Frequency | 10 - 2500 MHz | 10 - 2500 MHz |
| Gain (dB) | 8.5 | 7.5 Min. |
| Gain Flatness (dB) | +/- 0.4 | +/- 0.8 Max. |
| Power @ 1 dB Comp. (dBm) | 27.5 | 25.5 Min. |
| Reverse Isolation (dB) | -22 | -19 Max. |
| VSWR In | 1.6:1 | 1.8:1 Max.* |
| Out | 1.6:1 | 1.8:1 Max.* |
| Noise Figure (dB) 200-2500 MHz | 4.3 ** | 5.5 Max. ** |
| Power Vdc | +15 | +15 |
| mA | 185 | 195 Max. |

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

*2.1:1 below 20 MHz

** 1.0 dB higher between 100-200 MHz and 2000-2500 MHz

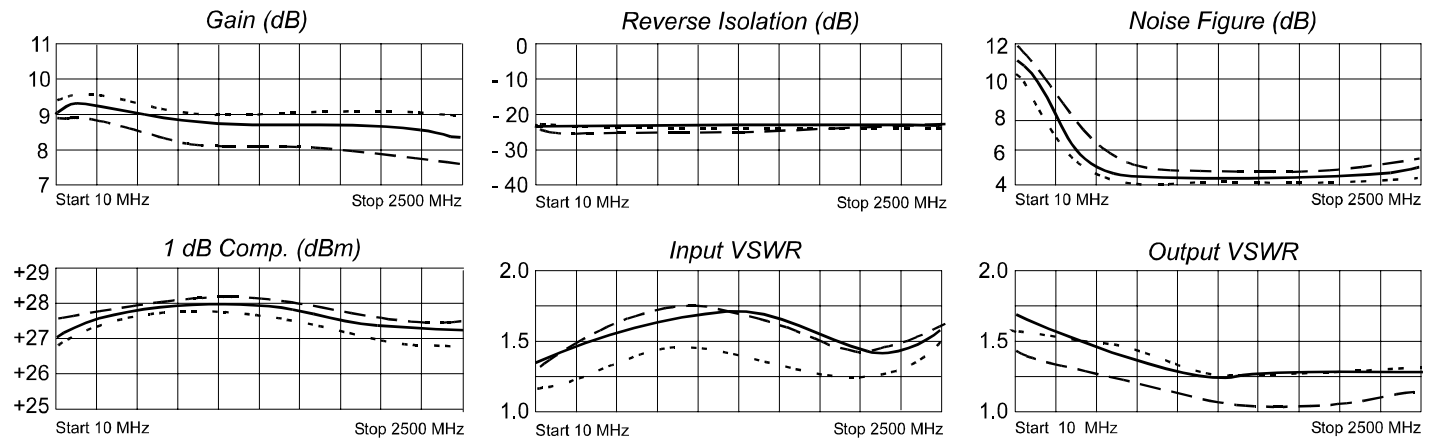
Intermodulation Performance

| Typical at 25 °C | Vcc = +12 V | Vcc = +15 V |
|---------------------------------------|-------------|-------------|
| Second Order Harmonic Intercept Point | +69 dBm | +58 dBm |
| Second Order Two Tone Intercept Point | +63 dBm | +52 dBm |
| Third Order Two Tone Intercept Point | +39 dBm | +40 dBm |

(Absolute) Maximum Ratings

Ambient Operating Temperature -55°C to +100 °C
 Storage Temperature -62°C to +125 °C
 Maximum Operating 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.)

Typical Performance Data



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



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Rev.
1/16/09

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