RF AMPLIFIER
MODEL  TM9759

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

Specifications

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

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

Typical Performance Data

- Gain (dB)
- Reverse Isolation (dB)
- Noise Figure (dB)
- 1 dB Comp. (dBm)
- Input VSWR
- Output VSWR

Legend ——— 25 ºC  ——— + 85 ºC  ——— +55 ºC

Intermodulation Performance

Typical at 25 ºC 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 ................. -55ºC to +100 ºC
- Storage Temperature ................................ -62ºC to +125 ºC
- Maximum Operating Case Temperature .............. +125 ºC
- 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.)

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

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