RF AMPLIFIER
MODEL   TM5149

Features
- High Gain: 23.5 dB Typical
- Low Noise Figure: <3 dB Typical
- Operating Temp. -55 ºC to +85 ºC
- Environmental Screening Available

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>5-150 MHz</td>
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</tr>
<tr>
<td>Gain (dB)</td>
<td>23.5</td>
<td>22.5 Min.</td>
</tr>
<tr>
<td>Power @ 1 dB Comp. (dBm)</td>
<td>+18</td>
<td>+17.0 Min.</td>
</tr>
<tr>
<td>Reverse Isolation (dB)</td>
<td>-29</td>
<td>-28 Max.</td>
</tr>
<tr>
<td>VSWR In</td>
<td>&lt;1.5:1</td>
<td>2.0:1 Max.</td>
</tr>
<tr>
<td>VSWR Out</td>
<td>&lt;1.5:1</td>
<td>2.0:1 Max.</td>
</tr>
<tr>
<td>Noise Figure (dB)</td>
<td>&lt;3.0</td>
<td>3.2 Max.</td>
</tr>
<tr>
<td>Power Vdc mA</td>
<td>+15</td>
<td>+15 Min.</td>
</tr>
</tbody>
</table>

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

Typical Performance Data

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

Available as: TM5149, 4 Pin TO-8 (T4)
               TN5149, 4 Pin Surface Mount (SM3)
               FP5149, 4 Pin Flatpack (FP4)
               BX5149, Connectored Housing (H1)

Typical Intermodulation Performance at 25 º C
- Second Order Harmonic Intercept Point........+43 dBm (Typ.)
- Second Order Two Tone Intercept Point........+37 dBm (Typ.)
- Third Order Two Tone Intercept Point.........+33 dBm (Typ.)

Maximum Ratings
Ambient Operating Temperature .............. -55 ºC to + 100 ºC
Storage Temperature                        -62ºC to + 125 ºC
Case Temperature ................................+ 125 ºC
DC Voltage ..................................... + 18Volts
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.)