RF AMPLIFIER
MODEL \textbf{TM3097}

Features
- High Output Power: 27.5 dBm Typical
- Low Phase Bipolar Design
- Operating Temp. - 55 °C to +85 °C
- Environmental Screening Available

Specifications

<table>
<thead>
<tr>
<th>CHARACTERISTIC</th>
<th>TYPICAL ( T_a = 25 ^\circ C )</th>
<th>MIN/MAX ( T_a = -55 ^\circ C ) to +85 °C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>10 - 300 MHz</td>
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</tr>
<tr>
<td>Gain (dB)</td>
<td>13.5</td>
<td>13 Min.</td>
</tr>
<tr>
<td>Power @ 1 dB Comp. (dBm)</td>
<td>+27.5</td>
<td>+27 Min.</td>
</tr>
<tr>
<td>Reverse Isolation (dB)</td>
<td>-17</td>
<td>-16 Max.</td>
</tr>
<tr>
<td>VSWR In</td>
<td>1.5:1</td>
<td>2.0:1 Max.</td>
</tr>
<tr>
<td>VSWR Out</td>
<td>1.5:1</td>
<td>2.0:1 Max.</td>
</tr>
<tr>
<td>Noise Figure (dB)</td>
<td>5.0</td>
<td>6.0 Max.</td>
</tr>
<tr>
<td>Power Vdc</td>
<td>+12</td>
<td>+12</td>
</tr>
<tr>
<td>mA</td>
<td>180</td>
<td>185 Max.</td>
</tr>
</tbody>
</table>

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

Typical Intermodulation Performance at 25 °C
- Second Order Harmonic Intercept Point .... +60 dBm (Typ.)
- Second Order Two Tone Intercept Point .... +55 dBm (Typ.)
- Third Order Two Tone Intercept Point ........ +44 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 ........................................ + 15 Volts
- Continuous RF Input Power .................... + 15 dBm
- Short Term RF Input Power .... 100 Milliwatts (1 Minute Max.)
- Maximum Peak Power ............................. 0.2 Watt (3 µsec Max.)

Available as:
- TM3097, 4 Pin TO-8 (T4)
- TN3097, 4 Pin Surface Mount (SM3)
- FP3097, 4 Pin Flatpack (FP4)
- BX3097, Connectorized Housing (H1)

Typical Performance Data

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