RF AMPLIFIER
MODEL  TM3089

Features
- Higher Output Power: +24.5 dBm Typical
- Superior Phase Noise Performance
- 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>10 - 160 MHz</td>
<td>10 - 160 MHz</td>
</tr>
<tr>
<td>Gain (dB)</td>
<td>20</td>
<td>19 Min.</td>
</tr>
<tr>
<td>Power @ 1 dB Comp. (dBm)</td>
<td>24.5</td>
<td>23 Min.</td>
</tr>
<tr>
<td>Reverse Isolation (dB)</td>
<td>-22</td>
<td>-21 Max.</td>
</tr>
<tr>
<td>VSWR</td>
<td>In 1.8:1</td>
<td>2.1:1 Max.</td>
</tr>
<tr>
<td></td>
<td>Out 1.8:1</td>
<td>2.0:1 Max.</td>
</tr>
<tr>
<td>Noise Figure (dB)</td>
<td>2.5</td>
<td>3.0 Max.</td>
</tr>
<tr>
<td>Power Vdc mA</td>
<td>+15</td>
<td>+15</td>
</tr>
<tr>
<td></td>
<td>110</td>
<td>120 Max.</td>
</tr>
</tbody>
</table>

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

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

Typical Intermodulation Performance at 25 ºC
- Second Order Harmonic Intercept Point ........ +58 dBm (Typ.)
- Second Order Two Tone Intercept Point ........ +52 dBm (Typ.)
- Third Order Two Tone Intercept Point .......... +40 dBm (Typ.)

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

Available as:
- TM3089, 4 Pin TO-8 (T4)
- TN3089, 4 Pin Surface Mount (SM3)
- FP3089, 4 Pin Flatpack (FP4)
- BX3089, Connectorized Housing (H1)