RF AMPLIFIER
MODEL TM9101

Available as: TM9101, 4 Pin TO-8 (T4)
TN9101, 4 Pin Surface Mount (SM3)
FP9101, 4 Pin Flatpack (FP4)
BX9101, Connectorized Housing (H1)

Features
■ Low Noise Figure: 2.4 dB Typical
■ Medium Gain: 15 dB Typical
■ Operating Temp. -55°C to +85°C
■ Environmental Screening Available

Specifications

<table>
<thead>
<tr>
<th>CHARACTERISTIC</th>
<th>TYPICAL Ta = 25°C</th>
<th>MIN/MAX Ta = -55°C to +85°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>5 - 1000 MHz</td>
<td>5 - 1000 MHz</td>
</tr>
<tr>
<td>Gain (dB)</td>
<td>15</td>
<td>14 Min.</td>
</tr>
<tr>
<td>Power @ 1 dB Comp. (dBm)</td>
<td>+1</td>
<td>-2 Min.</td>
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<tr>
<td>Reverse Isolation (dB)</td>
<td>-18</td>
<td>-17 Max.</td>
</tr>
<tr>
<td>VSWR In (&lt;1.25:1)</td>
<td>2.0:1 Max.</td>
<td></td>
</tr>
<tr>
<td>VSWR Out (&lt;1.25:1)</td>
<td>2.0:1 Max.</td>
<td></td>
</tr>
<tr>
<td>Noise Figure (dB)</td>
<td>2.4</td>
<td>4.0 Max.</td>
</tr>
<tr>
<td>Power Vdc (mA)</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>mA Max.</td>
<td>12 Max.</td>
<td></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)
- Input VSWR
- Output VSWR

Typical Intermodulation Performance at 25°C
Second Order Harmonic Intercept Point........+20 dBm (Typ.)
Second Order Two Tone Intercept Point...........+15 dBm (Typ.)
Third Order Two Tone Intercept Point...........+12 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 ........................................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.)

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