RF Limiting Amplifier
Low VSWR: <1.5:1

Model TML9012
20 to 550 MHz

Features
- Frequency: 20 to 500 MHz
- Low VSWR: <1.5:1 Typical
- Operating Temp. -55°C to +85°C
- Environmental Screening Available

Specifications

<table>
<thead>
<tr>
<th>CHARACTERISTIC</th>
<th>TYPICAL</th>
<th>MIN/MAX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency (MHz)</td>
<td>20 - 550 MHz</td>
<td>50 - 500 MHz</td>
</tr>
<tr>
<td>Small Signal Gain (dB)</td>
<td>13</td>
<td>11 Min.</td>
</tr>
<tr>
<td>Noise Figure (dB) 50-300 MHz</td>
<td>5.0</td>
<td>6.5 Max.</td>
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<tr>
<td>300-500 MHz</td>
<td>5.5</td>
<td>7.0 Max.</td>
</tr>
<tr>
<td>Gain Flatness (dB)</td>
<td>± 0.2</td>
<td>± 0.7</td>
</tr>
<tr>
<td>VSWR Input/Output</td>
<td>1.2:1/1.4:1</td>
<td>2.0:1 Max.</td>
</tr>
<tr>
<td>Output 1 dB Comp (dBm)</td>
<td>-1.5</td>
<td>-7.0 Min.</td>
</tr>
<tr>
<td>Output Limiting Level (Max.)</td>
<td>0.5 dBm</td>
<td>2.5 dBm</td>
</tr>
<tr>
<td>Power Vdc mA</td>
<td>+15</td>
<td>+15</td>
</tr>
<tr>
<td></td>
<td>54</td>
<td>59 Max.</td>
</tr>
</tbody>
</table>

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

Typical Performance Data

- Small Signal Gain (dB)
- Noise Figure (dB)
- VSWR vs. Frequency
- Power Output in Saturation

Legend
- + 25°C
- + 85°C
- -55°C

Maximum Ratings
- Ambient Operating Temperature -55°C to + 100°C
- Storage Temperature -62°C to + 125°C
- Case Temperature + 125°C
- DC Voltage +17 Volts
- Continuous RF Input Power +15 dBm

Packaging Options (see Appendix)
- TML9012, 4 Pin TO-8 (T4)
- TNL9012, 4 Pin Surface Mount (SM3)
- BXL9012, Connectorized Housing (H1)