**RF Limiting Amplifier**

**Low Phase Shift per dB of Compression**

**Model TML9002**

20 to 500 MHz

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**Features**

- Frequency: 20 to 500 MHz
- Low Phase Shift per dB of Compression
- Operating Temp. -55°C to +85°C
- Environmental Screening Available

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**Specifications**

<table>
<thead>
<tr>
<th>CHARACTERISTIC</th>
<th>TYPICAL</th>
<th>MIN/MAX</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Ta = 25°C</strong></td>
<td><strong>Ta = -55°C to +85°C</strong></td>
</tr>
<tr>
<td>Frequency</td>
<td>20 - 500 MHz</td>
<td>20 - 500 MHz</td>
</tr>
<tr>
<td>Small Signal Gain (dB)</td>
<td>12.6</td>
<td>11 Min.</td>
</tr>
<tr>
<td>Saturated Output Power</td>
<td>50-300 MHz, 300-500 MHz</td>
<td>8, 7 Min.</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>Noise figure (dB)</td>
<td>6.5</td>
<td>9 Max.</td>
</tr>
<tr>
<td>Power +Vdc (mA)</td>
<td>+15</td>
<td>+15 Max.</td>
</tr>
</tbody>
</table>

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

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**Typical Performance Data**

- Small Signal Gain (dB)
- Power Out vs Power In (dB)
- VSWR vs. Frequency

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**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

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**Packaging Options** (see Appendix)

- TML9002, 4 Pin TO-8 (T4)
- TNL9002, 4 Pin Surface Mount (SM3)
- BXL9002, Connectorized Housing (H1)