LNA-40-02000800-10-10P
LOW NOISE AMPLIFIER

FEATURES
• Unconditionally stable
• 50 Ohm input and output match
• Internally regulated
• Hermetically sealed package available
• Available as RoHS compliant

TYPICAL APPLICATIONS
• Wireless Infrastructure
• RF Microwave and VSAT
• Military and Aerospace
• Test Instruments
• Fiber Optics

ELECTRICAL SPECIFICATIONS (23°C)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Min</th>
<th>Max</th>
<th>Typ</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Range</td>
<td>2</td>
<td>8</td>
<td>-</td>
<td>GHz</td>
</tr>
<tr>
<td>Noise Figure</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>dB</td>
</tr>
<tr>
<td>Gain</td>
<td>40</td>
<td>-</td>
<td>-</td>
<td>dB</td>
</tr>
<tr>
<td>Gain Flatness (+/-)</td>
<td>-</td>
<td>1.5</td>
<td>-</td>
<td>dB</td>
</tr>
<tr>
<td>Output Power @ P1dB</td>
<td>10</td>
<td>-</td>
<td>-</td>
<td>dBm</td>
</tr>
<tr>
<td>Input VSWR</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Output VSWR</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Voltage</td>
<td>-</td>
<td>-</td>
<td>15</td>
<td>VDC</td>
</tr>
<tr>
<td>Current</td>
<td>-</td>
<td>250</td>
<td>-</td>
<td>mA</td>
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Absolute Maximum Ratings

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Rating</th>
<th>Units</th>
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<tbody>
<tr>
<td>Operating Voltage</td>
<td>20</td>
<td>V</td>
</tr>
<tr>
<td>RF Input Power</td>
<td>13</td>
<td>dBm</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-55 to +85</td>
<td>°C</td>
</tr>
<tr>
<td>Non-Operating Temp Range</td>
<td>-65 to +125</td>
<td>°C</td>
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</table>

Mechanical Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Rating</th>
<th>Units</th>
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<tbody>
<tr>
<td>Length</td>
<td>0.64</td>
<td></td>
</tr>
<tr>
<td>Width</td>
<td>0.70</td>
<td></td>
</tr>
<tr>
<td>Height</td>
<td>0.29</td>
<td></td>
</tr>
<tr>
<td>Input Connector</td>
<td>SMA(F)</td>
<td></td>
</tr>
<tr>
<td>Output Connector</td>
<td>SMA(F)</td>
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The material presented in this datasheet was current at the time of publication. L3 Narda-MITEQ’s continuing product improvement program makes it necessary to reserve the right to change our mechanical and electrical specifications without notice. If either of these parameters is critical, please contact the factory to verify that the information is current.

This material consists of L3 Narda-MITEQ general capabilities information and does not contain controlled technical data as defined within the International Traffic in Arms (ITAR) Part 120.10 or Export Administration Regulations (EAR) Part 734.7-11. D-405/05.01.18

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**Environmental Specifications**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Standard</th>
<th>Description</th>
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<tbody>
<tr>
<td>Operational temperature</td>
<td>-55 C to +85 C</td>
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</tr>
<tr>
<td>Storage temperature</td>
<td>-65 C to +125 C</td>
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</tr>
<tr>
<td>Random Vibration</td>
<td>MIL-STD-883K, Method 2026, Cond. IB</td>
<td>50 - 2000 Hz, 7.3 Grms</td>
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<tr>
<td>Humidity</td>
<td>MIL-STD-202, Method 1038, Cond. B</td>
<td>95% RH</td>
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<tr>
<td>Altitude</td>
<td>MIL-STD-883K, Method 1001, Cond. C</td>
<td>50,000 feet</td>
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</tbody>
</table>

*Amplifiers are designed to meet the above conditions. If ESS testing is required please contact factory.*