LNA, 500MHz to 6.5GHz

Model: BZ-00500650-192035-152020

Specifications (23 °C)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Range</td>
<td>0.5</td>
<td>-</td>
<td>6.5</td>
<td>GHz</td>
</tr>
<tr>
<td>Noise Figure*</td>
<td>-</td>
<td>1.7</td>
<td>1.9</td>
<td>dB</td>
</tr>
<tr>
<td>Gain</td>
<td>35</td>
<td>36</td>
<td>36</td>
<td>dB</td>
</tr>
<tr>
<td>Gain Flatness (+/-)</td>
<td>-</td>
<td>± 1.0</td>
<td>± 1.5</td>
<td>dB</td>
</tr>
<tr>
<td>P1 Output Power</td>
<td>+20</td>
<td>-</td>
<td>+22</td>
<td>- dBm</td>
</tr>
<tr>
<td>Input VSWR</td>
<td>-</td>
<td>-</td>
<td>2.0:1</td>
<td></td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-55</td>
<td>-</td>
<td>+85</td>
<td>°C</td>
</tr>
<tr>
<td>Non-Operating Temp Range</td>
<td>-65</td>
<td>-</td>
<td>+85</td>
<td>°C</td>
</tr>
<tr>
<td>RF Input Power (no-damage)</td>
<td>-</td>
<td>-</td>
<td>+13</td>
<td>dBm</td>
</tr>
<tr>
<td>Humidity (non-condensing)</td>
<td>-</td>
<td>-</td>
<td>95</td>
<td>%</td>
</tr>
<tr>
<td>Voltage</td>
<td>+15</td>
<td>+15</td>
<td>+15</td>
<td>VDC</td>
</tr>
<tr>
<td>Current</td>
<td>-</td>
<td>216</td>
<td>mA</td>
<td></td>
</tr>
<tr>
<td>Input Impedance</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>Ohms</td>
</tr>
<tr>
<td>RF Connector</td>
<td>3.5mm SMA - Female</td>
<td>3.5mm SMA - Female</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimensions</td>
<td>29.9 x 18.7 x 7.6 mm</td>
<td>29.9 x 18.7 x 7.6 mm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Features

• Noise Figure : 1.7dB (typ)
• Unconditionally Stable at all temperatures
• Internally Regulated DC Voltage
• 50 Ohm Matched Input/Output
• Field Replaceable 3.5mm SMA connectors
• Excellent Group Delay and Phase Linearity
• 0.009 inches diameter RF In/Out feed through
• Operating Temp. -40 C to +85 C
• 3 Year Warranty

Options

• Optimized Performance over Selected Bandwidth
• Internally DC Block Input (Output DC Block Standard)
• Hermetically Sealed Package
• Improved Gain Flatness
• Improved IN and OUT VSWR
• Gain and Phase matching
• Lower Noise Figure

*** IMPORTANT: UNIT REQUIRES HEATSINK ***

Typical Data

S21

Gain (dB)

Frequency (MHz)

S11

Return Loss (dB)

Power Out @ 1dB Compression

S22

Return Loss (dB)

Frequency (MHz)

Note:
- Noise Source used for measurement from 0.01 to 26.5 GHz is HP346C.
- NF Uncertainty (approx. 0.1dB). 0.05 dB due to ENR of HP 346C; and 0.05 dB, due to the gain modulation of the unit, caused by the HP 346C source impedance change in the ON and OFF state. Noise Figures and other parameters degrade below 500 MHZ.
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Approx. Actual Size

Mounting Drawing

Drop In

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NOTES:

1. HEATSINK SURFACE AREA 35.14 SQ. INCHES
2. HEATSINK MATERIAL: ALUMINUM ALLOY
3. APPROXIMATE TEMPERATURE RISE IS 6.5°C/W IN STILL AIR.