**Features**

- Noise Figure ≤ 5 dB (typ)
- Unconditionally Stable at all temperatures
- Internally Regulated DC Voltage
- 50 Ohm Matched Input/Output
- Field Replaceable 2.4mm V connectors
- Excellent Group Delay and Phase Linearity
- 0.009 inches diameter RF In/Out feed through
- Operating Temp. -55 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

**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>0.1</td>
<td>50</td>
<td>50</td>
<td>GHz</td>
</tr>
<tr>
<td>Noise Figure*</td>
<td>-</td>
<td>5</td>
<td>7</td>
<td>dB</td>
</tr>
<tr>
<td>Gain</td>
<td>21</td>
<td>25</td>
<td>7</td>
<td>dB</td>
</tr>
<tr>
<td>Gain Flatness (+/-)</td>
<td>-</td>
<td>± 2.5</td>
<td>± 3.5</td>
<td>dB</td>
</tr>
<tr>
<td>P1 Output Power</td>
<td>+5</td>
<td>8</td>
<td>-</td>
<td>dBm</td>
</tr>
<tr>
<td>P2 Output Power</td>
<td>2.2</td>
<td>2.5</td>
<td>1</td>
<td>dBm</td>
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<tr>
<td>Operating Temperature</td>
<td>-65</td>
<td>-</td>
<td>+85</td>
<td>°C</td>
</tr>
<tr>
<td>Non-Operating Temp Range</td>
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<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>
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<tr>
<td>Humidity (non-condensing)</td>
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<td>-</td>
<td>95</td>
<td>%</td>
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<tr>
<td>Voltage</td>
<td>+8</td>
<td>12</td>
<td>15</td>
<td>VDC</td>
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<tr>
<td>Current</td>
<td>-</td>
<td>155</td>
<td>mA</td>
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<tr>
<td>Input Impedance</td>
<td>50</td>
<td>50</td>
<td>Ohms</td>
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<td>RF Connector</td>
<td>2.4mm - Female</td>
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<tr>
<td>Dimensions</td>
<td>29.9 x 18.7 x 7.6</td>
<td>mm</td>
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</tr>
</tbody>
</table>

* Noise Source used for measurement from 0.1GHz to 50 GHz is HP346C-K01.
  NF Uncertainty (approx. 0.3 dB). 0.2 dB due to ENR of HP 346C-K01, and 0.1 dB due to the gain modulation of the unit caused by the HP 346C-K01 and source impedance change in the ON and OFF state.

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**Typical Data**

- S11
- S21
- Noise Figure
- Power Out @ 1dB Compression
- S11
- S22
- S21 Group Delay
- Return Loss (dB)
- Group Delay (ps)
- VSWR
- Power Out (dBm)
- Gain (dB)
- Frequency (MHz)

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LNA, 100MHz to 50GHz

Model: BZ-00105000-700521-352525

Approx. Actual Size

Mounting Drawing

Drop In