B&Z Technologies
Innovating to Excel

BZ1230LD1
WIDEBAND LNA, 12 - 30 GHz

Features

- **Noise Figure ≤3.0 dB**
- Unconditionally Stable at all temperatures
- Internally Regulated DC Voltage
- 50 Ohm Matched Input/Output
- Field Replaceable SMA connectors
- Drop in Package
- 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 ±1.0 dB Max
- Improved IN and OUT VSWR
- Gain and Phase matching
- Lower Noise Figure (Cryogenic Temp)

Specifications (23 °C)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
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</thead>
<tbody>
<tr>
<td>Frequency Range</td>
<td>12</td>
<td>-</td>
<td>30</td>
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<tr>
<td>Noise Figure *</td>
<td>3.0</td>
<td>dB</td>
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<tr>
<td>Gain</td>
<td>27</td>
<td>28</td>
<td>-</td>
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<tr>
<td>Gain Flatness</td>
<td>-</td>
<td>±1.5</td>
<td>dB</td>
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<tr>
<td>P1dB Output Power</td>
<td>6</td>
<td>7</td>
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<tr>
<td>Input VSWR</td>
<td>-</td>
<td>2.3</td>
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</tr>
<tr>
<td>Output VSWR</td>
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<tr>
<td>Operating Temperature</td>
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<td>+85</td>
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<tr>
<td>Third Order Intercept</td>
<td>16</td>
<td>dBm</td>
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<td>Second Order Intercept</td>
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<td>dBm</td>
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<td>Group Delay 12-30 GHz</td>
<td>±20</td>
<td>psec</td>
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<tr>
<td>Voltage</td>
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<td>V</td>
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<tr>
<td>Current</td>
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<td>170</td>
<td>195</td>
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</table>

* Noise Sources used for measurement: 12-18 GHz: HP346A, 18-30 GHz: HP346C-K01

Noise Figures and other parameters degrade below 500 MHz.

Noise Figures at Cryogenic Temp, not given due to uncertainty of measurement for very low values. Call to discuss.

Performance Graphs

- S21
- Noise Figure (dB)
- Power 1dB Compression
- Delay
- S11
- S22

Outline Drawing

Mounting Drawing