LNA, 8.9 to 9.5GHz  
Model: BZIL-08900950-14162125-072020

### Features
- Max No-Damage Input Power = +30dBm
- Noise Figure ≤ 1.4 dB
- 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. -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>
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<tr>
<th>Parameter</th>
<th>Min Typ Max</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>Frequency Range</td>
<td>8.9 - 9.5</td>
<td>GHz</td>
</tr>
<tr>
<td>Noise Figure*</td>
<td>- 1.3 1.4</td>
<td>dB</td>
</tr>
<tr>
<td>Gain</td>
<td>21 22 25</td>
<td></td>
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<tr>
<td>Gain Flatness (+/-)</td>
<td>± 0.5 ± 0.7</td>
<td>dB</td>
</tr>
<tr>
<td>P1 Output Power</td>
<td>+16 +17 -</td>
<td>dBm</td>
</tr>
<tr>
<td>Input VSWR</td>
<td>- - 2.0:1</td>
<td></td>
</tr>
<tr>
<td>Output VSWR</td>
<td>- - 2.0:1</td>
<td></td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-55 - +85</td>
<td>°C</td>
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<tr>
<td>Non-Operating Temp Range</td>
<td>-65 - +85</td>
<td>°C</td>
</tr>
<tr>
<td>RF Input Power (no-damage)</td>
<td>- - 30</td>
<td></td>
</tr>
<tr>
<td>Humidity (non-condensing)</td>
<td>- - 95</td>
<td>%</td>
</tr>
<tr>
<td>Voltage</td>
<td>+12 +12 +20</td>
<td>VDC</td>
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<tr>
<td>Current</td>
<td>- 81</td>
<td>mA</td>
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<tr>
<td>Input Impedance</td>
<td>50</td>
<td>Ohms</td>
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<tr>
<td>RF Connector</td>
<td>3.5mm SMA - Female</td>
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</tr>
<tr>
<td>Dimensions</td>
<td>29.9 x 18.7 x 7.6</td>
<td>mm</td>
</tr>
</tbody>
</table>

* 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.

### Typical Data

#### S21
- Max Gain: 28 dB
- Min Gain: 18 dB

#### Noise Figure
- Max Noise Figure: 1.9 dB
- Min Noise Figure: 0.9 dB

#### Power Out @ 1dB Compression
- Max Power: 21 dBm
- Min Power: 0 dBm

#### S12
- Max Return Loss: 0 dB

#### S11
- Max Return Loss: 0 dB

#### S22
- Max Return Loss: 0 dB
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Approx. Actual Size

Mounting Drawing

Drop In

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