### 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>-</td>
<td>18</td>
<td>GHz</td>
</tr>
<tr>
<td>Noise Figure*</td>
<td>-</td>
<td>1.8</td>
<td>2.0</td>
<td>dB</td>
</tr>
<tr>
<td>Gain</td>
<td>30</td>
<td>32</td>
<td>-</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>+10</td>
<td>+13</td>
<td>-</td>
<td>dBm</td>
</tr>
<tr>
<td>Input VSWR</td>
<td>-</td>
<td>2.0:1</td>
<td>2.3:1</td>
<td></td>
</tr>
<tr>
<td>Output VSWR</td>
<td>-</td>
<td>2.0:1</td>
<td>2.3:1</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>
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<tr>
<td>Voltage</td>
<td>+12</td>
<td>+12</td>
<td>+15</td>
<td>VDC</td>
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<tr>
<td>Current</td>
<td>-</td>
<td>110</td>
<td>mA</td>
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<tr>
<td>Input Impedance</td>
<td>50</td>
<td></td>
<td>Ohms</td>
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<td>RF Connector</td>
<td>3.5mm SMA - 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>

### Features
- Noise Figure ≤ 2.0 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

*Note: This amplifier does not have a DC-block. Model#: BZL-00101800-231030-152323 has a DC block and a limiter at the input capable of handling power levels of up to +25dBm for EMC and similar applications.

* 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 Figure and other parameters degrade below 500MHz.

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**Typical Data**

- **S21**
  - Gain (dB)
  - Frequency (MHz)

- **Noise Figure**
  - Noise Figure (dB)
  - Frequency (MHz)

- **Power Out @ 1dB Compression**
  - Power (dBm)
  - Frequency (MHz)

- **S11**
  - Return Loss (dB)
  - Frequency (MHz)

- **S12**
  - Return Loss (dB)
  - Frequency (MHz)

- **S22**
  - Return Loss (dB)
  - Frequency (MHz)

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LNA, 100MHz to 18GHz
Model: BZ-00101800-201030-152323

Approx. Actual Size

Mounting Drawing

Drop In Mounting Drawing

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