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>17.7</td>
<td>-</td>
<td>21.2</td>
<td>GHz</td>
</tr>
<tr>
<td>Noise Figure*</td>
<td>-</td>
<td>4.7</td>
<td>5</td>
<td>dB</td>
</tr>
<tr>
<td>Gain</td>
<td>22</td>
<td>23</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>+24</td>
<td>+25</td>
<td>-</td>
<td>dBm</td>
</tr>
<tr>
<td>Input VSWR</td>
<td>-</td>
<td>-</td>
<td>1.5:1</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>
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<tr>
<td>Current</td>
<td>-</td>
<td>475</td>
<td>mA</td>
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<tr>
<td>Input Impedance</td>
<td>50</td>
<td>-</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>
<td>Dimensions</td>
<td>29.9 x 18.7 x 7.6</td>
<td></td>
<td>mm</td>
<td></td>
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</tbody>
</table>

**Features**

- Noise Figure ≤ 5.0 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

*** IMPORTANT: UNIT Requires HEATSINK ***

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* 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.

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**Typical Data**

- **S21**: 27 dB Max, 18 dB Min
- **Noise Figure**: 5.0 dB Max, 3.0 dB Min
- **Power Out @ 1dB Compression**: 29 dB Max
- **S12**: -10 dB Max
- **S11**: -15 dB Max
- **S22**: -10 dB Max
LNA, 17.7 to 21.2GHz
Model: BZ3-17702120-502422-151515

Approx. Actual Size

Mounting Drawing

Drop In

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Rev: NP
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.