**B&Z TECHNOLOGIES**

**Innovating to Excel**

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**BZ0412MD1**

**WIDEBAND MEDIUM POWER AMPLIFIER, 4 - 12 GHz**

### Features

- **Power Out 1 dB comp. ≥ 24 dBm**
- Unconditionally Stable at all temperatures
- Internally Regulated DC Voltage
- 50 Ohm Matched Input/Output
- Field Replaceable SMA connectors
- Excellent Group Delay and Phase Linearity
- 0.009 inches diameter RF In/Out feed through
- 3 Year Warranty

### Options

- Optimized Performance over Selected Bandwidth
- Internally DC Block Input (Output DC Block Standard)
- Hermetically Sealed Package
- Gain and Phase matching
- Extended bandwidth to 100 MHz.
- Internal D.C. Voltage regulation

### Specifications (23 °C)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Range</td>
<td>4</td>
<td>12</td>
<td>GHz</td>
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<tr>
<td>Noise Figure</td>
<td>3.8</td>
<td>dB</td>
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<tr>
<td>Gain</td>
<td>30</td>
<td>32</td>
<td>dBm</td>
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<tr>
<td>Gain Flatness</td>
<td>±1.8</td>
<td>dB</td>
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<tr>
<td>*P1dB Output Power</td>
<td>24</td>
<td>-</td>
<td>dBm</td>
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<tr>
<td>Input VSWR</td>
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</tr>
<tr>
<td>Output VSWR</td>
<td>-</td>
<td>2.0</td>
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<tr>
<td>Operating Temperature</td>
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<td>-</td>
<td>°C</td>
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<tr>
<td>**Voltage</td>
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<tr>
<td>Current</td>
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</table>

*IMP: UNIT REQUIRES HEAT SINK.  **Input +15V with internal D.C. voltage Regulation available

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### Performance Graphs

- **S21**
- **Noise Figure (dB)**
- **Power 1dB Compression**
- **Delay**
- **S11**
- **Input Return Loss (dB)**
- **S22**
- **Output Return loss (dB)**

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### Outline Drawing

### Mounting Drawing

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**Drop In Module**

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