RF AMPLIFIER
MODEL CZ8460

Features
- High Gain: 14.5 dB Typical
- Low Noise Figure: <3.3 dB Typical
- Operating Temp. -55 ºC to +85 ºC
- Environmental Screening Available

Specifications

<table>
<thead>
<tr>
<th>CHARACTERISTIC</th>
<th>TYPICAL</th>
<th>MIN/MAX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>KHz -400 MHz</td>
<td>KHz - 400 MHz</td>
</tr>
<tr>
<td>Gain (dB)</td>
<td>15</td>
<td>14 Min.</td>
</tr>
<tr>
<td>Power @ 1 dB Comp. (dBm)</td>
<td>-1.5</td>
<td>-4.0 Min.</td>
</tr>
<tr>
<td>Reverse Isolation (dB)</td>
<td>-20</td>
<td>-19 Max.</td>
</tr>
<tr>
<td>VSWR In</td>
<td>&lt;1.5:1</td>
<td>2:1 Max.</td>
</tr>
<tr>
<td>VSWR Out</td>
<td>&lt;1.75:1</td>
<td>2:1 Max.</td>
</tr>
<tr>
<td>Noise Figure  (dB)</td>
<td>&lt;3.3</td>
<td>4:0 Max.</td>
</tr>
<tr>
<td>Power Vdc</td>
<td>+15</td>
<td>+15</td>
</tr>
<tr>
<td>mA</td>
<td>10</td>
<td>12 Max.</td>
</tr>
</tbody>
</table>

Note: Care should always be taken to effectively ground the case of each unit.

Typical Performance Data

- Gain (dB)
- Reverse Isolation (dB)
- Noise Figure (dB)

Legend

- +25 ºC
- +85 ºC
- -55 ºC

The CZ846X Series Amplifiers are designed for application in 50 ohm systems. Three external capacitors and a decoupling impedance are required. The decoupling impedance must be large in comparison to the 50 ohm load to minimize gain reduction. Data sheet curves are based on the noted decoupling impedance. The external capacitors determine the low frequency response of the Amplifier.

The CZ846X Series Amplifiers can be cascaded in series of two or more units without oscillation problems.

Typical Intermodulation Performance at 25 ºC
- Second Order Harmonic Intercept Point.....+16 dBm (Typ.)
- Second Order Two Tone Intercept Point....+10 dBm (Typ.)
- Third Order Two Tone Intercept Point......+11 dBm (Typ.)

Maximum Ratings
- Ambient Operating Temperature ............-55ºC to +100 ºC
- Storage Temperature ..............................-62ºC to +125 ºC
- Case Temperature .................................+125 ºC
- DC Current .....................................+18 Volts
- Continuous RF Input Power ..................+13 dBm
- Short Term RF Input Power .................50 Milliwatts (1 Minute Max.)
- Maximum Peak Power .......................0.5 Watt (3 µsec Max.)

Available as:
- CZ8460, 4 Pin TO-12 (T7)
- TN8460, 4 Pin Surface Mount (SM3)
- FP8460, 4 Pin Flatpack (FP4)
- PN8460, Reduced Size Surface Mount (SM11)