RF/Microwave Amplifier

Features

- Low Noise Figure: 3.3 dB
- Wide 1 – 250 MHz Bandwidth
- Environmental Screening Available
- Unconditionally Stable

Technical Specifications

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>TYPICAL Ta = +25 ºC</th>
<th>MIN/MAX Ta = -55ºC to +85 ºC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>1 – 250 MHz</td>
<td>1 – 150 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>+25</td>
<td>+23.5 Min.</td>
</tr>
<tr>
<td>Reverse Isolation (dB)</td>
<td>-28</td>
<td>--</td>
</tr>
<tr>
<td>VSWR In</td>
<td>1.75:1</td>
<td>2.0:1 Max.</td>
</tr>
<tr>
<td>VSWR Out</td>
<td>1.75:1</td>
<td>2.0:1 Max.</td>
</tr>
<tr>
<td>Noise Figure (dB)**</td>
<td>3.3</td>
<td>4.5 Max.</td>
</tr>
<tr>
<td>Power* Vdc</td>
<td>+15</td>
<td>+15</td>
</tr>
<tr>
<td>mA</td>
<td>135</td>
<td>140 Max.</td>
</tr>
</tbody>
</table>

1) Care should always be taken to effectively ground the case of each unit
2) Typical values are measured at 25°C, but not guaranteed.
3) Package drawings below are for reference only.

*Power Output @1 dB Compression: 1 dB lower below 2 MHz.
**Noise Figure: 10-150 MHz.

Typical Intermodulation Performance at 25 ºC

- Second Order Harmonic Intercept Point: +66 dBm (Typ.)
- Second Order Two Tone Intercept Point: +60 dBm (Typ.)
- Third Order Two Tone Intercept Point: +43 dBm (Typ.)

Note: Measured at 50 MHz at 25C.

Absolute Maximum (No Damage) Ratings

- Operating Temperature: -55°C to +100 ºC
- Storage Temperature: -62°C to +125°C
- Case Temperature: +125 ºC
- DC Voltage: +18 Volts
- Continuous RF Input Power: +17 dBm
- Short Term RF Input Power: 100 Milliwatts (1 Minute Max.)
- Maximum Peak Power: 0.5 Watt (3 µsec Max.)
Instructions

Grounding Instructions  Care should be taken to effectively ground each unit.

Revisions  API reserves the right to make revisions to both product and/or the information contained within their datasheets without advanced notice.

Min./Max. Values  Specifications are guaranteed when tested in a 50 Ω (ohm) system.

Typical performance graphs and values are measured at 25°C, but not guaranteed.

1) Outlines drawings below are for reference only.