RF/Microwave Amplifier

Features
- Low Noise Figure: 1.7 dB
- Wide 2000 – 4300 MHz Bandwidth
- Environmental Screening Available
- Unconditionally Stable

Technical Specifications

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>TYPICAL ( T_a = +25 , ^\circ C )</th>
<th>MIN/MAX ( T_a = -55^\circ C ) to +85 (^\circ C )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>2000 – 4300 MHz</td>
<td>2000 – 4200 MHz</td>
</tr>
<tr>
<td>Gain (dB)</td>
<td>16</td>
<td>15 Min.</td>
</tr>
<tr>
<td>Power @ 1 dB Comp. (dBm)</td>
<td>+22</td>
<td>+20 Min.</td>
</tr>
<tr>
<td>Reverse Isolation (dB)</td>
<td>25</td>
<td>--</td>
</tr>
<tr>
<td>VSWR In</td>
<td>1.8:1</td>
<td>2.0:1 Max.</td>
</tr>
<tr>
<td>VSWR Out</td>
<td>1.8:1</td>
<td>2.0:1 Max.</td>
</tr>
<tr>
<td>Noise Figure (dB)</td>
<td>1.7</td>
<td>2.3 Max.</td>
</tr>
<tr>
<td>Power Vdc</td>
<td>+12</td>
<td>+12</td>
</tr>
<tr>
<td>mA</td>
<td>90</td>
<td>100 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.

Typical Intermodulation Performance at 25 °C

- Second Order Harmonic Intercept Point: +45 dBm (Typ.)
- Second Order Two Tone Intercept Point: +40 dBm (Typ.)
- Third Order Two Tone Intercept Point: +33 dBm (Typ.)

Note: Measured at 3000 MHz at 25C.

Absolute Maximum (No Damage) Ratings

- Operating Temperature: -55°C to +100°C
- Storage Temperature: -62°C to +125°C
- Case Temperature: +125 °C
- DC Voltage: +15 Volts
- Continuous RF Input Power: +18 dBm
- Short Term RF Input Power: 200 Milliwatts (1 Minute Max.)
- Maximum Peak Power: 0.5 Watt (3 µsec Max.)
Typical Performance Graphs

**Gain (dB)**

![Graph showing gain (dB) vs. frequency (GHz)]

**Noise Figure (dB)**

![Graph showing noise figure (dB) vs. frequency (GHz)]

**1 dB Compression (dBm)**

![Graph showing 1 dB compression (dBm) vs. frequency (GHz)]

**Reverse Isolation (dB)**

![Graph showing reverse isolation (dB) vs. frequency (GHz)]

**Input VSWR**

![Graph showing input VSWR vs. frequency (GHz)]

**Output VSWR**

![Graph showing output VSWR vs. frequency (GHz)]
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.