RF/Microwave Amplifier

Features
- Low Noise Figure: 1.2 dB
- No External Circuitry Needed
- RoHS Compliant Model Available
- Unconditionally Stable
- EAR99

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>200 – 500 MHz</td>
<td>200 – 500 MHz</td>
</tr>
<tr>
<td>Gain (dB)</td>
<td>21</td>
<td>19.5 Min.</td>
</tr>
<tr>
<td>Power @ 1 dB Comp. (dBm)</td>
<td>+26.5</td>
<td>+25 Min.</td>
</tr>
<tr>
<td>Reverse Isolation (dB)</td>
<td>-30</td>
<td>--</td>
</tr>
<tr>
<td>VSWR In</td>
<td>1.5:1</td>
<td>2.0:1 Max.</td>
</tr>
<tr>
<td>VSWR Out</td>
<td>1.5:1</td>
<td>2.0:1 Max.</td>
</tr>
<tr>
<td>Noise Figure (dB)</td>
<td>1.2</td>
<td>2.5 Max.</td>
</tr>
<tr>
<td>Power Vdc</td>
<td>+15</td>
<td>+15</td>
</tr>
<tr>
<td>mA</td>
<td>165</td>
<td>175 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 ºC

- Second Order Harmonic Intercept Point: +48 dBm (Typ.)
- Second Order Two Tone Intercept Point: +43 dBm (Typ.)
- Third Order Two Tone Intercept Point: +33 dBm (Typ.)

Note:
Intercept Values Measured at 400 MHz.

Absolute Maximum (No Damage) Ratings

- Operating Temperature: -55ºC to +100 ºC
- Storage Temperature: -62ºC to +125ºC
- Case Temperature: +125 ºC
- DC Voltage: +18 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

Model # TM3126

Gain

Noise Figure

Output Power (1 dB Compression)

Reverse Isolation

Input VSWR

Output VSWR
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.