SLNA-030-15-25-SMA is a low noise RF coaxial power amplifier operating in the 500 MHz to 3 GHz frequency range. The amplifier offers Noise Figure of 2.0 dB typ, 20 dBm min of P1dB and 14.5 dB typ of small signal gain. This exceptional technical performance is achieved through the use of hybrid MIC design and advanced GaAs E-pHEMT devices. The low noise amplifier requires an operating voltage between +5 VDC and +12VDC power supply. The connectorized SMA module is unconditionally stable and includes built-in voltage regulation, bias sequencing.

### Electrical Specifications

<table>
<thead>
<tr>
<th>Description</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Range</td>
<td>0.5</td>
<td>3</td>
<td></td>
<td>GHz</td>
</tr>
<tr>
<td>Small Signal Gain</td>
<td></td>
<td>14.5</td>
<td></td>
<td>dB</td>
</tr>
<tr>
<td>Gain Flatness</td>
<td></td>
<td>±0.4</td>
<td></td>
<td>dB</td>
</tr>
<tr>
<td>Output at 1 dB Compression Point</td>
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<td>+20</td>
<td></td>
<td>dBm</td>
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<tr>
<td>Output 3rd Intercept Point</td>
<td></td>
<td>+31</td>
<td>+35</td>
<td>dBm</td>
</tr>
<tr>
<td>Noise Figure</td>
<td></td>
<td>2</td>
<td>3</td>
<td>dB</td>
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<tr>
<td>Input VSWR</td>
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<td>1.93:1</td>
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<tr>
<td>Output VSWR</td>
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<td>1.93:1</td>
<td></td>
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<tr>
<td>Operating DC Voltage</td>
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<td>5</td>
<td>12</td>
<td>Volts</td>
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<tr>
<td>Operating DC Current</td>
<td></td>
<td>90</td>
<td></td>
<td>mA</td>
</tr>
</tbody>
</table>

### Mechanical Specifications

**Size**
- Length: 1.38 in [35.05 mm]
- Width: 1.18 in [29.97 mm]
- Height: 0.5 in [12.7 mm]
- Input Connector: SMA Female
- Output Connector: SMA Female

### Compliance Certifications

(visit www.FairviewMicrowave.com for current document)
- RoHS Compliant: Yes

### Features:

- 500 MHz to 3 GHz Frequency Range
- P1dB: 20 dBm typ
- Small Signal Gain: 14.5 dB typ
- Noise Figure: 2.0 dB typ
- 50 Ohm Input and Output Matched
- Unconditionally Stable
- Single DC Positive Supply
- Built-in Voltage Regulator

### Applications:

- Laboratory Applications
- R&D Labs
- Radar Systems
- Telecom Infrastructure
- Test Instrumentation
- Communication Systems
- Wireless Communication
- Microwave Radio Systems
- Cellular Base Stations
- Low Noise Amplifier
- General Purpose Amplification
- General Purpose Wireless
- Wideband Gain Block
- IF Amplifier/RF Driver Amplifier
- RF Wideband Front Ends
- RF Pre-amplification

### Notes:

- Values at 25 °C, sea level
- ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in approved ESD Workstation.
Typical Performance Data

**Gain, Input Return Loss and Output Return Loss**

- **Gain (dB) @+25 °C**
- **IN_Return Loss (dB)**
- **OUT_Return Loss (dB)**

**Gain vs Temperature**

- **Gain (dB) @+25 °C**
- **Gain (dB) @+50 °C**
- **Gain (dB) @-10 °C**
- **Gain (dB) @-20 °C**

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2 dB NF Low Noise Amplifier Operating From 500 MHz to 3 GHz with 14.5 dB Gain, 20 dBm P1dB and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: 2 dB NF Low Noise Amplifier Operating From 500 MHz to 3 GHz with 14.5 dB Gain, 20 dBm P1dB and SMA SLNA-030-15-25-SMA


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2 dB NF Low Noise Amplifier Operating From 500 MHz to 3 GHz with 14.5 dB Gain, 20 dBm P1dB and SMA