SLNA-014-40-35-SMA is an L-band high gain low noise coaxial amplifier operating in the 1.2 to 1.4 GHz frequency range. The low noise amplifier offers 15 dBm min of P1db and high 40 dB typical small signal gain with gain flatness of ±0.75 dB typical. This excellent technical performance is achieved through the use of hybrid MIC design and advanced GaAs PHEMT devices. The low noise amplifier requires typically a +12V DC power supply. The connectorized SMA module is unconditionally stable and includes built-in voltage regulation, bias sequencing, and reverse bias protection for added reliability. The amplifier operates over the temperature range of -40°C and +85°C.

**Electrical Specifications** (TA = +25°C, DC Voltage = 12Volts, DC Current = 200mA)

<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>1.2</td>
<td>1.4</td>
<td>GHz</td>
<td></td>
</tr>
<tr>
<td>Small Signal Gain</td>
<td>40</td>
<td></td>
<td></td>
<td>dB</td>
</tr>
<tr>
<td>Gain Flatness</td>
<td>±0.75</td>
<td>±1</td>
<td>±1.8</td>
<td>dB</td>
</tr>
<tr>
<td>Gain Variance at OTR*</td>
<td></td>
<td></td>
<td></td>
<td>dB</td>
</tr>
<tr>
<td>Output at 1 dB Compression Point</td>
<td>+15</td>
<td></td>
<td></td>
<td>dBm</td>
</tr>
<tr>
<td>Noise Figure</td>
<td></td>
<td>1.5</td>
<td></td>
<td>dB</td>
</tr>
<tr>
<td>Input VSWR</td>
<td></td>
<td>2:1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Output VSWR</td>
<td></td>
<td>2:1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating DC Voltage</td>
<td>10.8</td>
<td>12</td>
<td>13.2</td>
<td>Volts</td>
</tr>
<tr>
<td>Operating DC Current</td>
<td>200</td>
<td>250</td>
<td></td>
<td>mA</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>-40</td>
<td>+85</td>
<td></td>
<td>°C</td>
</tr>
</tbody>
</table>

*OTR= Base Plate Operating Temperature Range

**Absolute Maximum Rating**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Rating</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source Voltage</td>
<td>+15</td>
<td>Volts</td>
</tr>
<tr>
<td>RF input Power</td>
<td>+17</td>
<td>dBM</td>
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<tr>
<td>Operating Temperature (base-plate)</td>
<td>-40 to +85</td>
<td>°C</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-55 to +85</td>
<td>°C</td>
</tr>
</tbody>
</table>

ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in approved ESD Workstation.

**Configuration**

- Connector 1: SMA Female
- Connector 2: SMA Female

**Compliance Certifications** (visit www.FairviewMicrowave.com for current document)

- RoHS Compliant: Yes

**Features:**

- 1.2 GHz to 1.4 GHz Frequency Range
- P1dB: 15 dBm min
- Small Signal Gain: 40 dB min
- Gain Flatness: ±0.75 dB typical
- Noise Figure: 1.5 dB max
- 50 Ohm Input and Output Matched
- Unconditionally Stable
- Regulated Supply & Bias Sequencing
- Hermetically Sealed Module
- Overvoltage External Protection for Easy Repair

**Applications:**

- 1.2 GHz to 1.4 GHz Frequency Range
- P1dB: 15 dBm min
- Small Signal Gain: 40 dB min
- Gain Flatness: ±0.75 dB typical
- Noise Figure: 1.5 dB max
- 50 Ohm Input and Output Matched
- Unconditionally Stable
- Regulated Supply & Bias Sequencing
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Plotted and Other Data

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

Power Data

Gain, Input Return Loss and Output Return Loss

Gain vs Temperature
40 dB Gain 1.5 dB NF Low Noise High Gain Amplifier Operating From 1.2 GHz to 1.4 GHz with 15 dBm 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: 40 dB Gain 1.5 dB NF Low Noise High Gain Amplifier Operating From 1.2 GHz to 1.4 GHz with 15 dBm and SMA SLNA-014-40-35-SMA


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40 dB Gain 1.5 dB NF Low Noise High Gain Amplifier Operating From 1.2 GHz to 1.4 GHz with 15 dBm and SMA