The FMAM1023 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 10 dBm min of P1db and 25 dB typical small signal gain with gain flatness of ±0.75dB 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 +75°C.

**Electrical Specifications (TA = +25°C, DC Voltage = 12Volts, DC Current = 150mA)**

<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>25</td>
<td></td>
<td></td>
<td>dB</td>
</tr>
<tr>
<td>Gain Flatness</td>
<td>±0.75</td>
<td>±1</td>
<td></td>
<td>dB</td>
</tr>
<tr>
<td>Output at 1 dB Compression Point</td>
<td>+10</td>
<td></td>
<td></td>
<td>dBm</td>
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<tr>
<td>Noise Figure</td>
<td>1.5</td>
<td></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>
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<tr>
<td>Operating DC Current</td>
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<td></td>
<td></td>
<td>mA</td>
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<tr>
<td>Operating Temperature Range</td>
<td>-40</td>
<td></td>
<td>+75</td>
<td>°C</td>
</tr>
</tbody>
</table>

**Mechanical Specifications**

- **Size**
  - Length: 2.32 in [58.93 mm]
  - Width: 2.32 in [58.93 mm]
  - Height: 0.71 in [18.03 mm]
- **Input Connector**: SMA Female
- **Output Connector**: SMA Female

**Environmental Specifications**

- **Temperature**
  - Operating Range: -40 to +75 deg C

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

- RoHS Compliant: Yes

**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.
Typical Performance Data

![Gain, Input Return Loss and Output Return Loss](image)

![Noise Figure](image)
1.5 dB NF Low Noise Amplifier Operating From 1.2 GHz to 1.4 GHz with 25 dB Gain, 10 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: 1.5 dB NF Low Noise Amplifier Operating From 1.2 GHz to 1.4 GHz with 25 dB Gain, 10 dBm P1dB and SMA FMAM1023


The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability, arising out of the use of any part or documentation.
1.5 dB NF Low Noise Amplifier Operating From 1.2 GHz to 1.4 GHz with 25 dB Gain, 10 dBm P1dB and SMA

NOTE:
HEAT SINK REQUIRED FOR PROPER OPERATION,
UNIT IS COOLED BY CONDUCTING TO HEAT SINK.

FAIRVIEW MICROWAVE INC.
ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM

TITLE
1.5 dB NF Low Noise Amplifier Operating From 1.2 GHz to 1.4 GHz with 25 dB Gain, 10 dBm P1dB and SMA

NOTES:
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES [mm].