FMAM1000 is a L-band coaxial low noise amplifier operating in the 1 to 2 GHz frequency range. The amplifier offers 1.5 dB noise figure, 10 dBm minimum of saturated power and high 35 dB minimal small signal gain with gain flatness of ±1.0 dB max. This 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 = 12Vdc, DC Current = 200mA)

<table>
<thead>
<tr>
<th>Description</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Unit</th>
</tr>
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<tbody>
<tr>
<td>Frequency Range</td>
<td>1</td>
<td>2</td>
<td></td>
<td>GHz</td>
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<tr>
<td>Small Signal Gain</td>
<td>35</td>
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<td></td>
<td>dB</td>
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<tr>
<td>Gain Flatness</td>
<td>±1</td>
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<td></td>
<td>dB</td>
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<tr>
<td>Output at 1 dB Compression Point</td>
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<td>dBm</td>
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<tr>
<td>Saturated Output Power (Psat)</td>
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<td></td>
<td>dBm</td>
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<tr>
<td>Noise Figure</td>
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<td></td>
<td>dB</td>
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<td>Input VSWR</td>
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</tr>
<tr>
<td>Output VSWR</td>
<td>2:1</td>
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<tr>
<td>Operating DC Voltage</td>
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<td>12</td>
<td>13</td>
<td>Volts</td>
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<tr>
<td>Operating DC Current</td>
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<td></td>
<td>mA</td>
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<tr>
<td>Operating Temperature Range</td>
<td>-40</td>
<td></td>
<td>+85</td>
<td>°C</td>
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</table>

**Mechanical Specifications**

- **Size**
  - Length: 1.77 in [44.96 mm]
  - Width: 1 in [25.4 mm]
  - Height: 0.5 in [12.7 mm]
- **Weight**: 0.071 lbs [32.21 g]
- **Input Connector**: SMA Female
- **Output Connector**: SMA Female

**Environmental Specifications**

- **Temperature**
  - Operating Range: -40 to +85 deg C
  - Shock: RTCA, DO-160C
  - Vibration: RTCA, DO-160C

**Compliance Certifications** (see product page for current document)

**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

Gain (dB) vs Temperature

Gain (dB) vs Frequency (GHz)
1.5 dB NF Low Noise Amplifier, Operating From 1 GHz to 2 GHz with 35 dB Gain, 10 dBm Psat 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 GHz to 2 GHz with 35 dB Gain, 10 dBm Psat and SMA FMAM1000

URL: https://www.fairviewmicrowave.com/1.5db-nf-low-noise-amplifier-35db-fmam1000-p.aspx
1.5 dB NF Low Noise Amplifier, Operating From 1 GHz to 2 GHz with 35 dB Gain, 10 dBm Psat and SMA

STANDARD TOLERANCES
.X ±0.2
.XX ±0.01
.XXX ±0.005

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES