The FMAM3309 is a broadband coaxial power amplifier, operating in the 1 MHz to 3 GHz frequency range. Impressive broadband typical performance includes 4 dB noise figure, 16 dB small signal gain, +20 dBm P1dB, and an output 3rd order intercept point of +35 dBm. This exceptional technical performance is achieved through the use of hybrid MIC design and advanced InGap GaAs HBT devices.

The low noise amplifier requires a +15V DC power supply, and operates over a temperature range of -40°C to +85°C. The rugged and compact package supports SMA Female connectors and RFI and Ground pins. And for highly reliable operation, the model is guaranteed to meet MIL-STD-202 environmental test conditions for Humidity, Shock, Vibration, and Altitude.

### Electrical Specifications (TA= 25°C, VDC1 = 15 Vdc)

<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>
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<td>3</td>
<td>GHz</td>
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<tr>
<td>Gain</td>
<td>16</td>
<td>21</td>
<td></td>
<td>dB</td>
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<tr>
<td>Gain Flatness</td>
<td>±1.5</td>
<td>±2</td>
<td></td>
<td>dB</td>
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<tr>
<td>P1dB</td>
<td>+20</td>
<td>+22</td>
<td></td>
<td>dBm</td>
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<tr>
<td>IP3</td>
<td>+33</td>
<td>+35</td>
<td></td>
<td>dBm</td>
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<tr>
<td>Reverse Isolation</td>
<td>-20</td>
<td>-23</td>
<td></td>
<td>dB</td>
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<td>Noise Figure</td>
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<td></td>
<td>dB</td>
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<tr>
<td>Input VSWR</td>
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</tr>
<tr>
<td>Output VSWR</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Operating DC Voltage 1</td>
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<td>15</td>
<td>16</td>
<td>Volts</td>
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<tr>
<td>Operating DC Current</td>
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<td>130</td>
<td>+50</td>
<td>mA</td>
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<td>Operating Temperature Range (OTR)</td>
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<td></td>
<td>°C</td>
</tr>
</tbody>
</table>

### Mechanical Specifications

- Weight: 0.086 lbs [39.01 g]
- Input Connector: SMA Female
- Output Connector: SMA Female

### Environmental Specifications

- Temperature
  - Operating Range: 0 to +50 deg C
  - Storage Range: -40 to +100 deg C
  - Vibration: MIL-STD-202F, Method 204D, Condition B

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sales@fairviewmicrowave.com
Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

Typical Performance Data

![VSWR Chart](image)

- VSWR at different MHz levels

![Gain Chart](image)

- Gain in dB at different MHz levels
4 dB NF, 1 MHz to 3 GHz, Low Noise Broadband Amplifier with 22 dBm, 21 dB Gain, 35 dBm IP3 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: 4 dB NF, 1 MHz to 3 GHz, Low Noise Broadband Amplifier with 22 dBm, 21 dB Gain, 35 dBm IP3 and SMA FMAM3309


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.
FMAM3309 DATA SHEET

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

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

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].

FMAM3309

CAD FILE 04/23/18 SHEET 1 OF 1 SCALE N/A SIZE A 7341

Fairview Microwave
an INFINITY brand

4 dB NF, 1 MHz to 3 GHz, Low Noise Broadband Amplifier with 22 dBm, 21 dB Gain, 35 dBm IP3 and SMA

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