

**1.5 dB NF Low Noise Amplifier, Operating From 1 GHz to 2 GHz with 35 dB Gain, 10 dBm Psat and SMA**

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  $\pm 1.0$  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)

Description	Min	Typ	Max	Unit
Frequency Range	1		2	GHz
Small Signal Gain	35			dB
Gain Flatness			$\pm 1$	dB
Output at 1 dB Compression Point	+10			dBm
Saturated Output Power (Psat)	+10			dBm
Noise Figure		1.5		dB
Input VSWR			2:1	
Output VSWR			2:1	
Operating DC Voltage	11	12	13	Volts
Operating DC Current			200	mA
Operating Temperature Range	-40		+85	°C

**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.

**Features:**

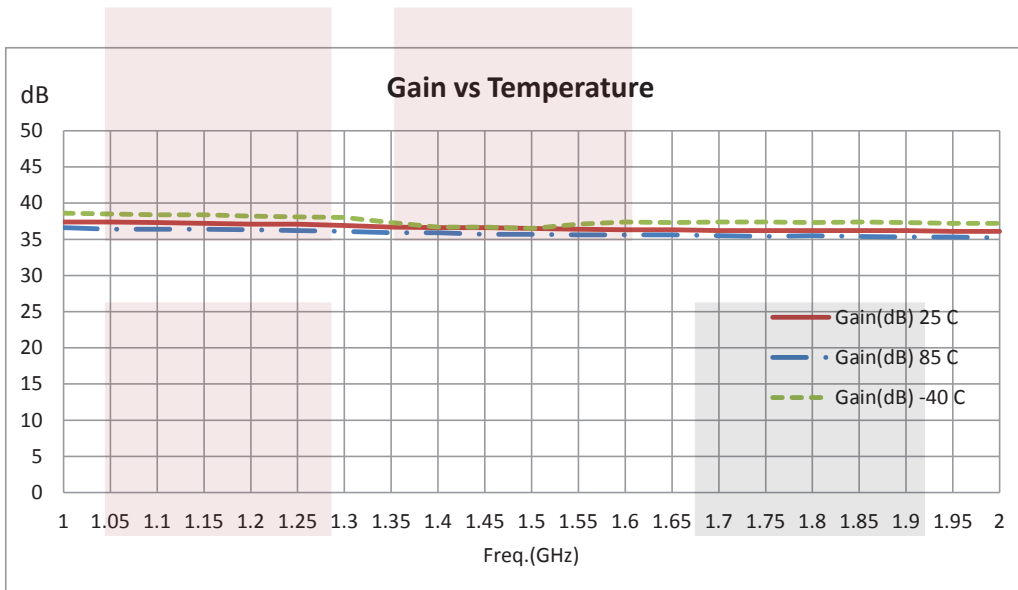
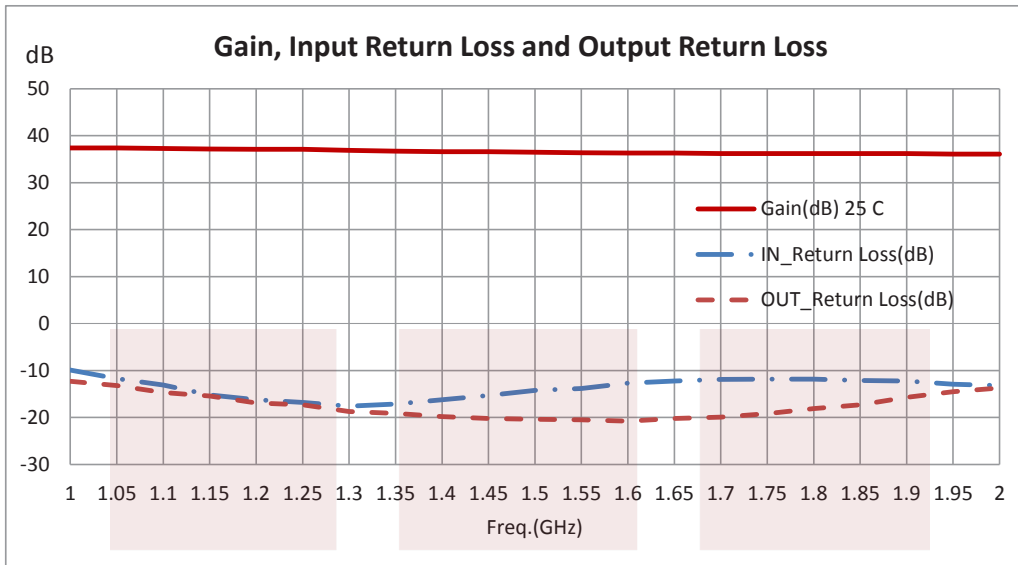
- 1 GHz to 2 GHz Frequency Range
- Psat: 10 dBm min
- High Small Signal Gain: 35 dB
- Gain Flatness:  $\pm 1.0$  dB max
- Noise Figure: 1.5 dB
- 50 Ohm Input and Output Matched
- -40 to 85°C Operating Temperature
- Unconditionally Stable
- Regulated Supply & Bias Sequencing
- Hermetically Sealed Module
- Overvoltage External Protection for Easy Repair

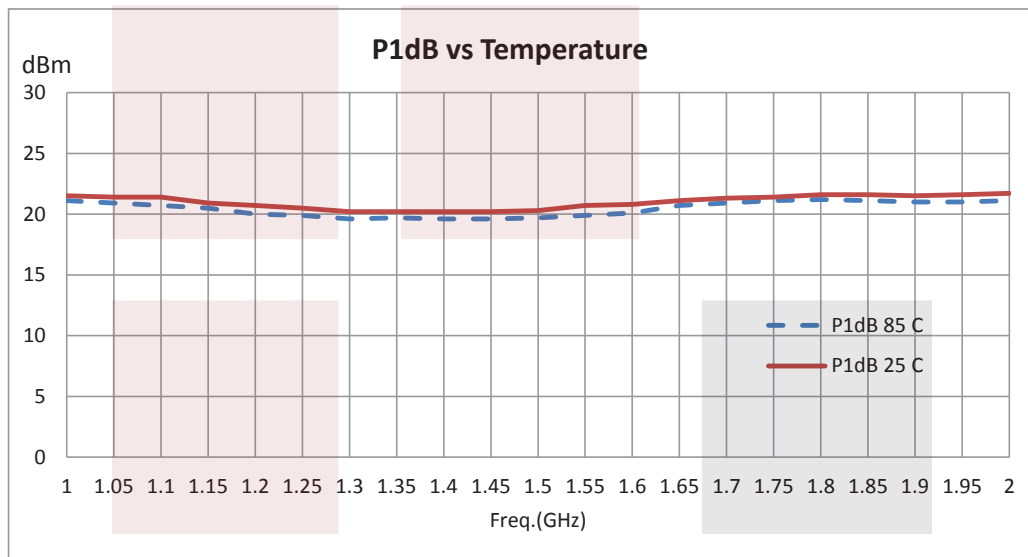
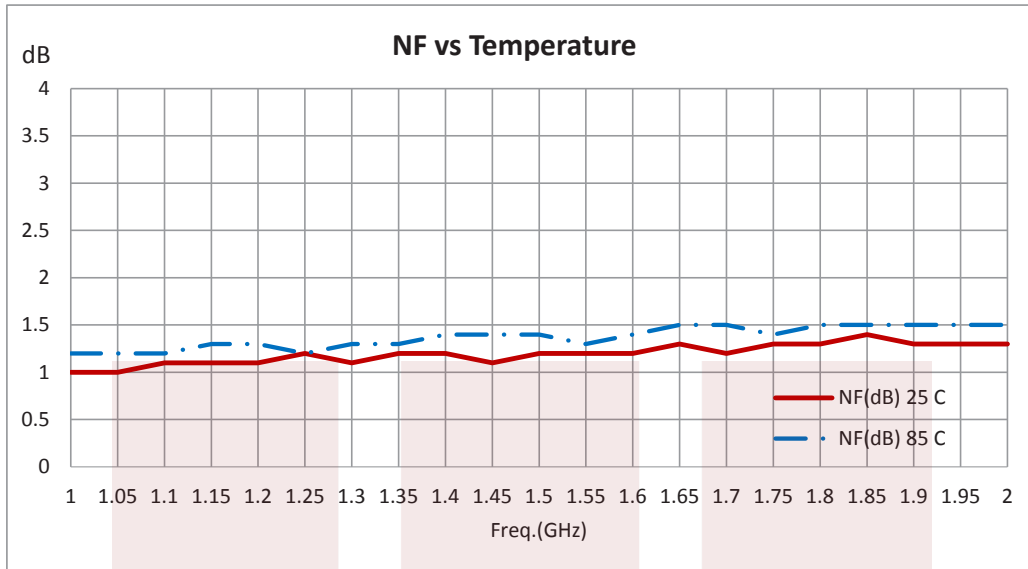
**Applications:**

- Laboratory Applications
- R&D Labs
- Radar Systems
- Telecom Infrastructure
- Test Instrumentation
- Military & Space
- Communication Systems
- Satellite Communications
- Wireless Communications
- Microwave Radio Systems
- Low Noise Amplifier
- General Purpose Amplification
- Gain Block

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**Typical Performance Data**



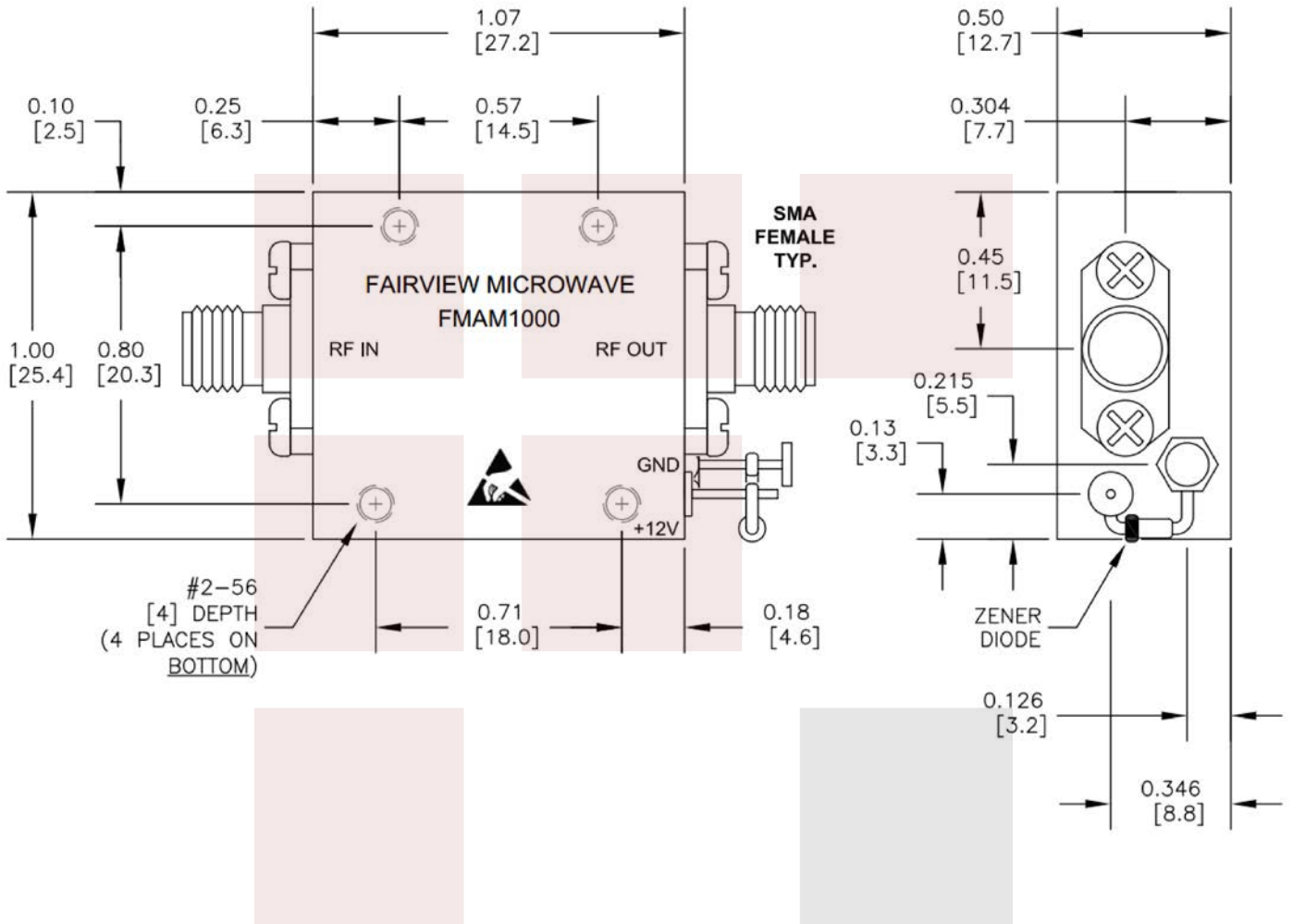


1.5 dB NF Low Noise Amplifier, Operating From 1 GHz to 2 GHz with 35 dB Gain, 10 dBm Psat and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave 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>

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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).			
TITLE 1.5 dB NF Low Noise Amplifier, Operating From 1 GHz to 2 GHz with 35 dB Gain, 10 dBm Psat and SMA		DWG NO FMAM1000		CAGE CODE 3FKR5	
CAD FILE	05/18/18	SHEET	1 OF 1	SCALE	N/A
				SIZE	A
					7361