

5.5 dB NF, 30 MHz to 26.5 GHz, Low Noise Broadband Amplifier with 16 dBm, 15 dB Gain and SMA

The FMAM3312 is a broadband coaxial low noise amplifier, operating in the 30 MHz to 26.5 GHz frequency range. The amplifier offers 16 dBm typical P1dB, 5.5 dB noise figure, 15 dB typical small signal gain and ± 2.0 dB maximum gain flatness. This low noise amplifier requires a single positive DC voltage supply with internal voltage regulation, is unconditionally stable, and operates over the temperature range of -20°C to $+70^{\circ}\text{C}$. The compact package incorporates field replaceable SMA connectors and can be drop mounted onto a printed circuit board. The rugged design is guaranteed to meet MIL-STD-202 environmental test conditions for Over Temperature, Humidity, Shock, Altitude, and Temperature Cycle.

Electrical Specifications (TA= 25°C)

Description	Min	Typ	Max	Unit
Frequency Range	0.03		26.5	GHz
Gain		15		dB
Gain Flatness			± 2	dB
P1dB	+16			dBm
Noise Figure (> 500 MHz)		5.5		dB
Input VSWR		2:1		
Output VSWR		2:1		
Operating DC Voltage 1	12		15	Volts
Operating DC Current		230		mA
Operating Temperature Range (OTR)	-20		+70	$^{\circ}\text{C}$

Mechanical Specifications

Size *Excluding Connectors*

Length	1.08 in [27.43 mm]
Width	0.71 in [18.03 mm]
Height	0.29 in [7.37 mm]
Input Connector	Field Replaceable SMA Female
Output Connector	Field Replaceable SMA Female

Environmental Specifications

Temperature

Operating Range	-20 to +70 deg C
Storage Range	-55 to +125 deg C

Humidity	MIL-STD-202F, METHOD 103B COND. B
Shock	MIL-STD-202F, METHOD 213B COND. B
Altitude	MIL-STD-202F, METHOD 105C COND. B
Temperature Cycling	MIL-STD-202F, METHOD 107D COND. A

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:



Features:

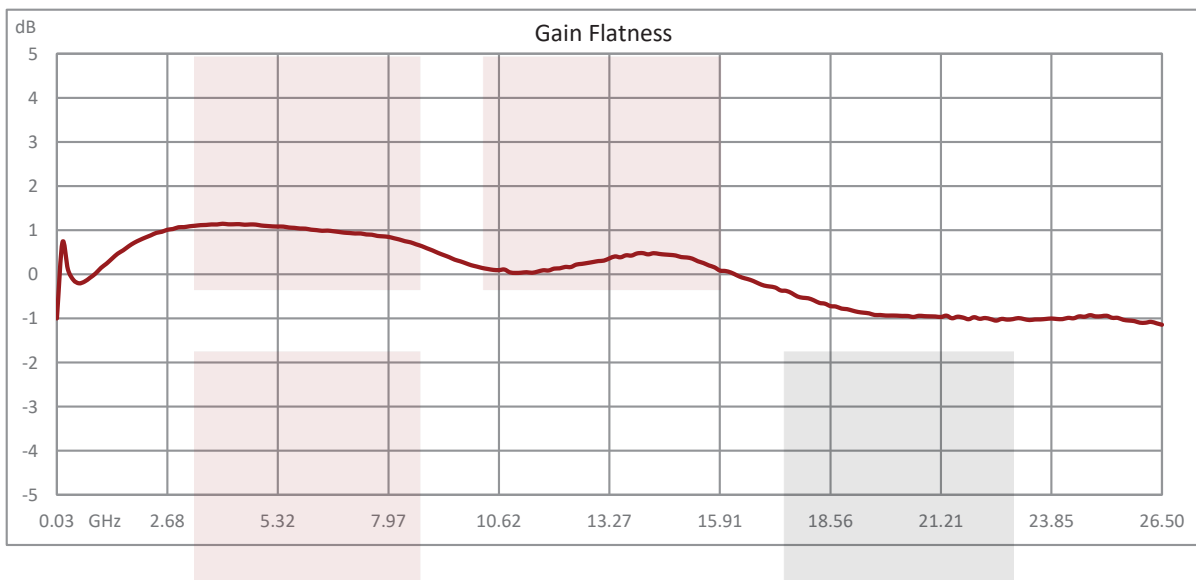
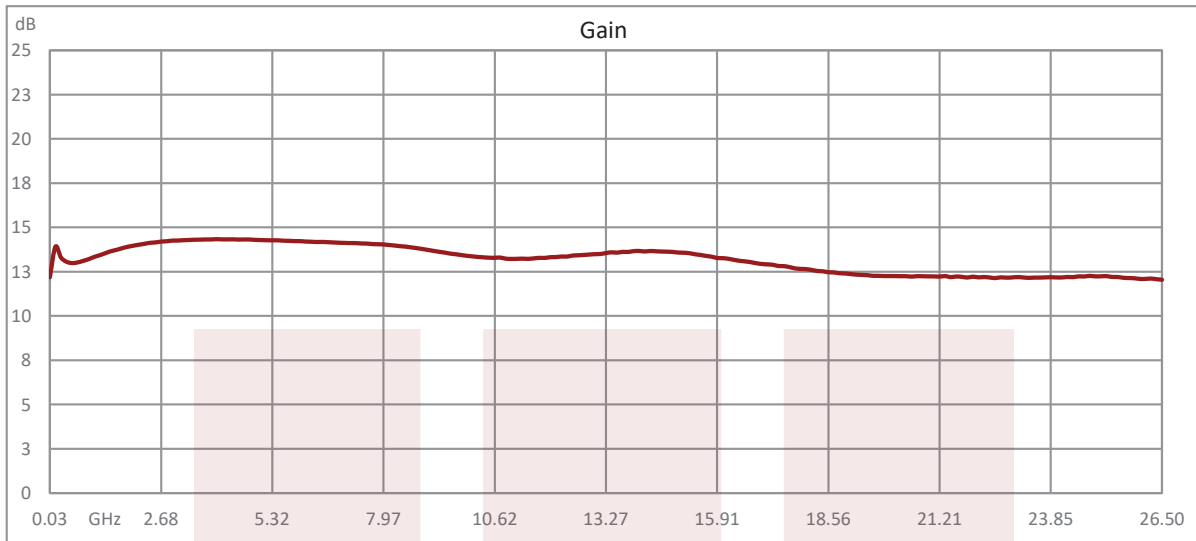
- 0.03 to 26.5 GHz Frequency Range
- P1dB: 16 dBm
- Small Signal Gain: 15 dB typ
- Gain Flatness: ± 2.0 dB max
- Noise Figure: 5.5 dB typ
- 50 Ohm Input and Output Matched
- -20°C to $+70^{\circ}\text{C}$ Operating Temperature
- Unconditionally Stable
- Single DC Positive Voltage Supply
- Built-in DC Voltage Regulator
- Field Replaceable SMA Connectors
- Compact Package can be Drop Mounted onto a PWB

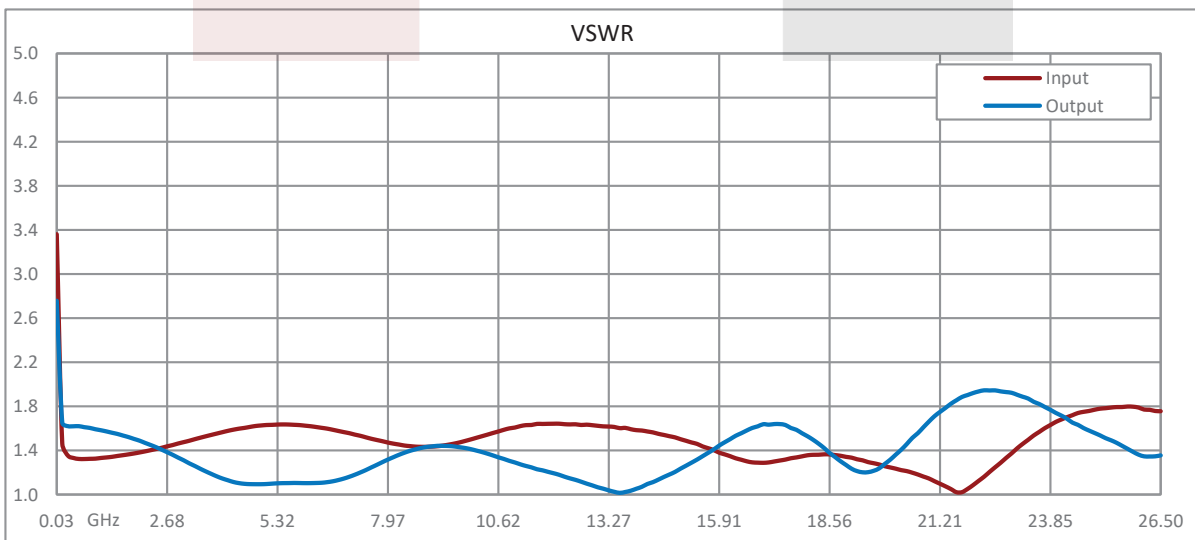
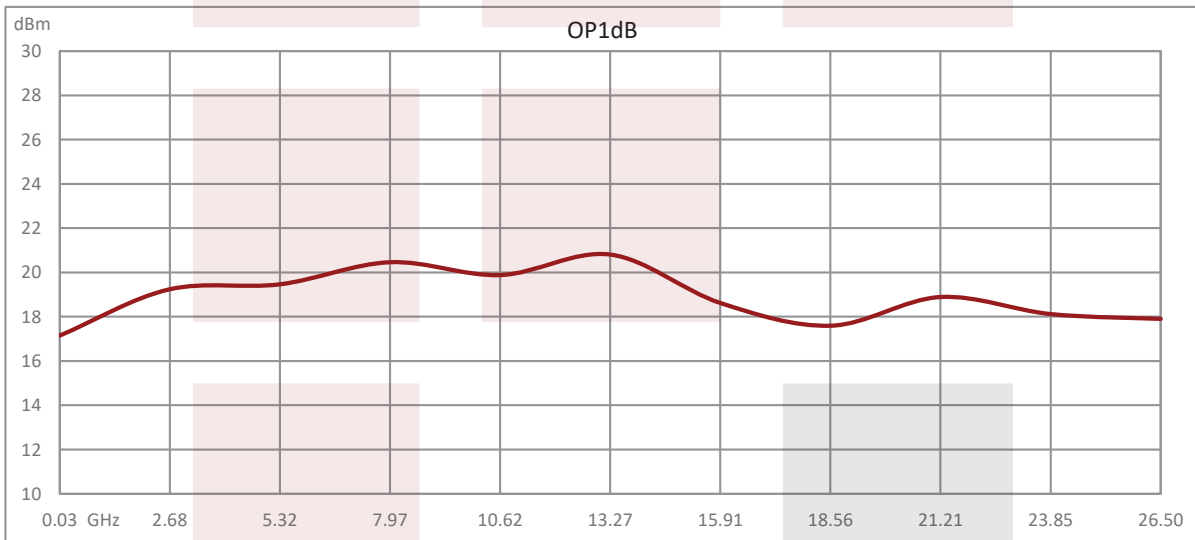
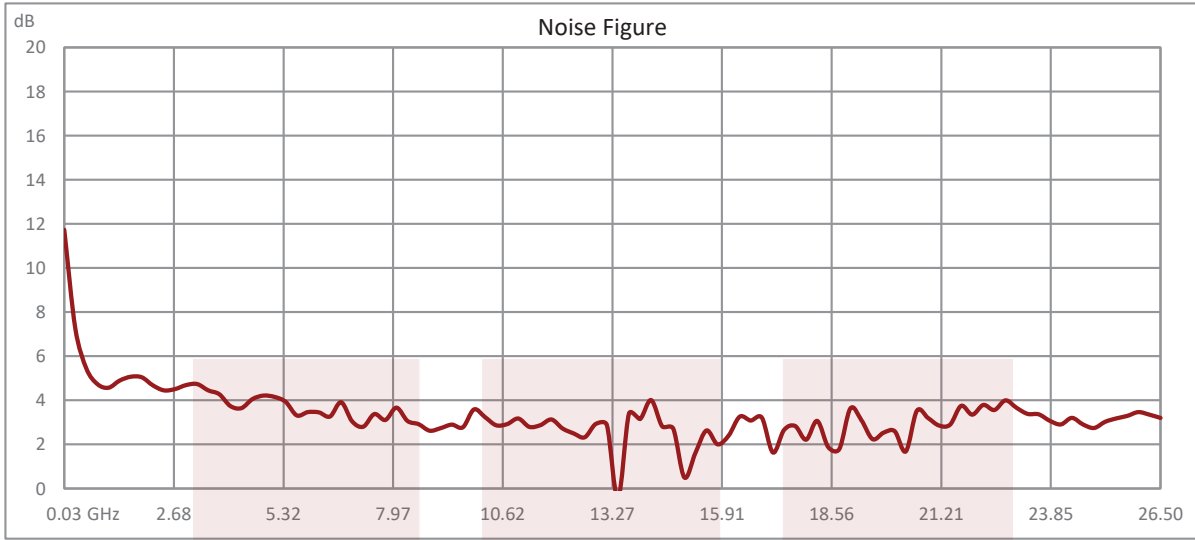
Applications:

- Laboratory Applications
- R&D Labs
- Test Instrumentation
- Military & Space
- Communication Systems
- Satellite Communications
- Wireless Communications
- Unmanned Systems
- Microwave Radio Systems
- Low Noise Amplifier
- General Purpose Amplification
- RF Front Ends

Fairview Microwave
 301 Leora Ln., Suite 100
 Lewisville, TX 75056
 Tel: 1-800-715-4396 / (972) 649-6678
 Fax: (972) 649-6689
www.fairviewmicrowave.com
sales@fairviewmicrowave.com

Typical Performance Data



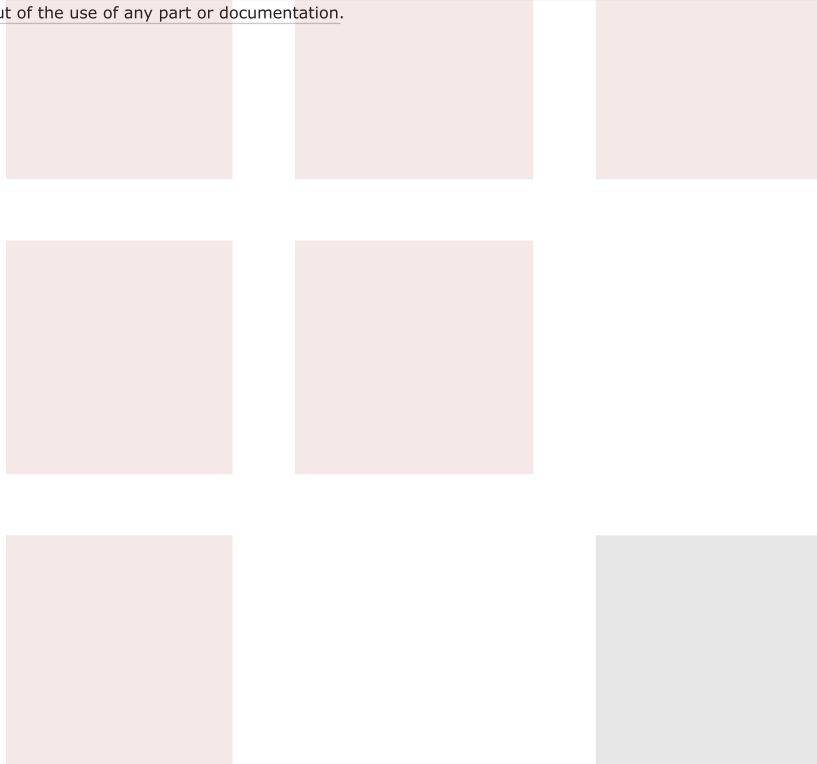


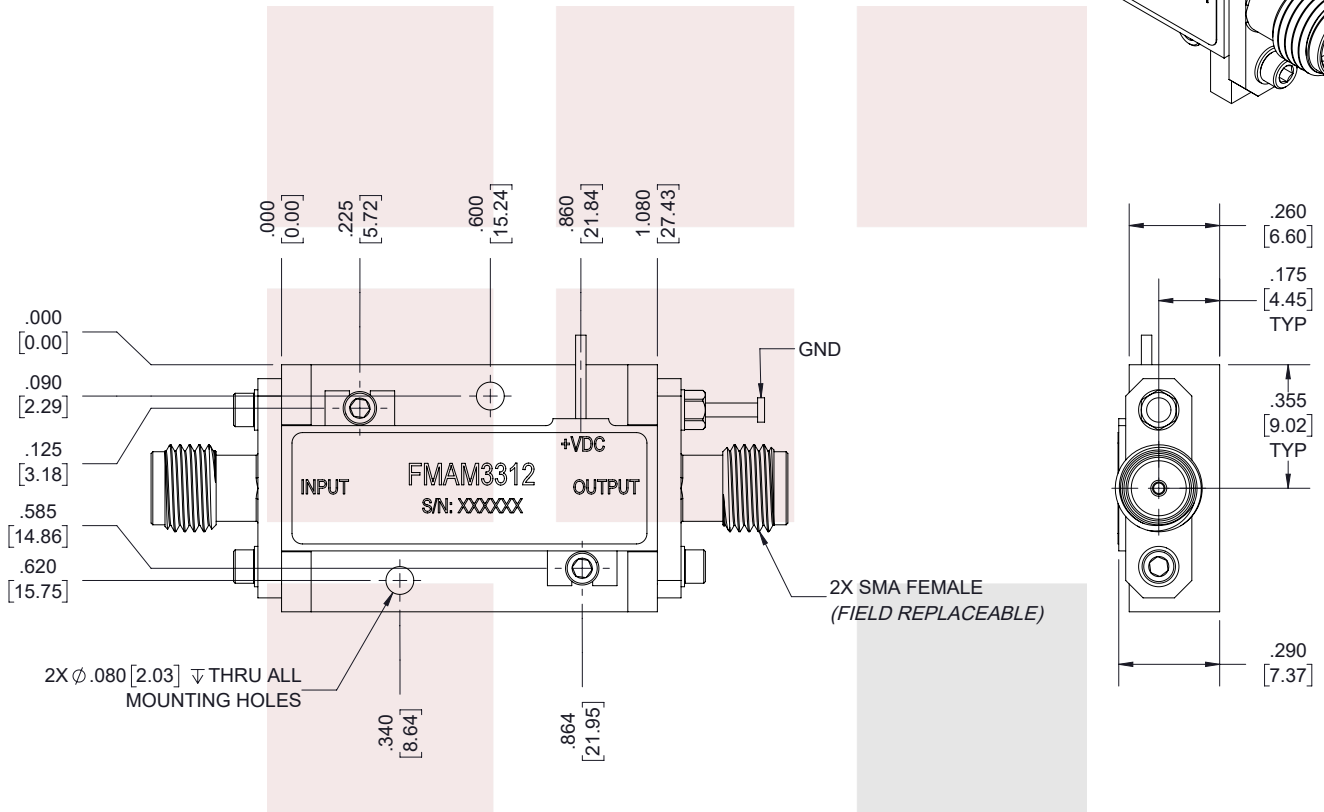
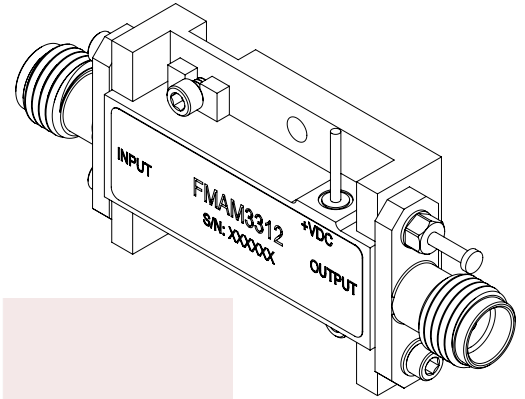
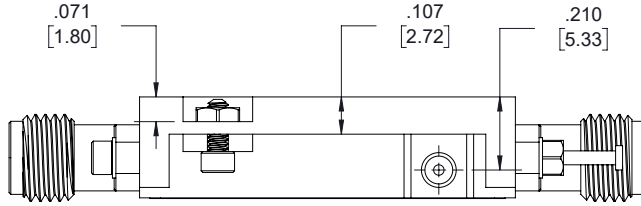
5.5 dB NF, 30 MHz to 26.5 GHz, Low Noise Broadband Amplifier with 16 dBm, 15 dB Gain and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [5.5 dB NF, 30 MHz to 26.5 GHz, Low Noise Broadband Amplifier with 16 dBm, 15 dB Gain and SMA FMAM3312](#)

URL: <https://www.fairviewmicrowave.com/30-mhz-26.5-ghz-low-noise-broadband-amplifier-fmam3312-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

<p>Fairview Microwave an INFINITE brand</p>		<p>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].</p>						
<p>TITLE 5.5 dB NF, 30 MHz to 26.5 GHz, Low Noise Broadband Amplifier with 16 dBm, 15 dB Gain and SMA</p>		<p>DWG NO FMAM3312</p>		<p>CAGE CODE 3FKR5</p>				
CAD FILE	09/17/19	SHEET	1 OF 1	SCALE	N/A	SIZE	A	7361