Fairview Microwave
RF COMPONENTS ON DEMAND. Done!

FMAM3309
DATA SHEET

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

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.

Features:

- 1 MHz to 3 GHz Frequency Range
- P1dB: +20 dBm
- Small Signal Gain: 16 dB
- Gain Flatness: ±1.5 dB
- 50 Ohm Input and Output Matched
- Output IP3: +35 dBm
- Advanced InGap GaAs HBT Design
- -40 to +85°C Operating Temperature
- +15V / 110mA DC Positive Supply
- SMA Female Connectors
- Designed to meet MIL-STD-202 Test Conditions

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

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

Description	Min	Typ	Max	Unit
Frequency Range	0.001		3	GHz
Gain	16	21		dB
Gain Flatness		±1.5	±2	dB
P1dB	+20	+22		dBm
IP3	+33	+35		dBm
Reverse Isolation	-20	-23		dB
Noise Figure		4	4.5	dB
Input VSWR		1.5:1	2:1	
Output VSWR		2:1	2.5:1	
Operating DC Voltage 1	14	15	16	Volts
Operating DC Current		110	130	mA
Operating Temperature Range (OTR)	0		+50	°C

Performance by Frequency

Description	Minimum	Typical	Maximum	Units
Frequency Range	1		3000	MHz
Gain				
Frequency = 1MHz	17.0	18.5		
Frequency = 10MHz	19.0	20.5		
Frequency = 100MHz	19.5	21.0		
Frequency = 1500MHz	18.0	19.5		
Frequency = 3000MHz	16.0	17.5		

dB

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

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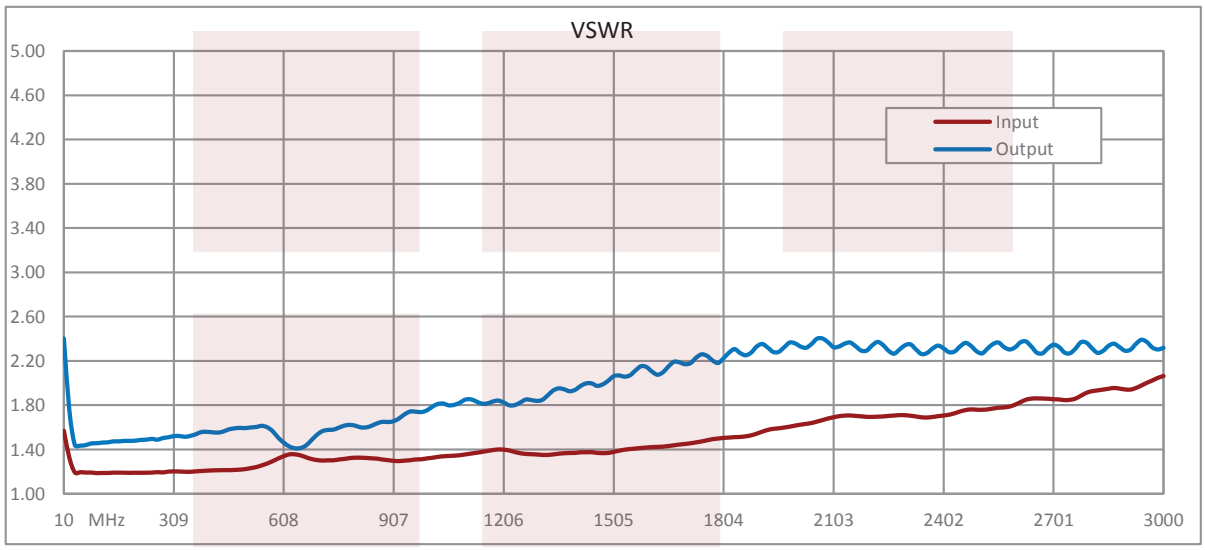
Humidity	MIL-STD-202F, Method 103B, Condition B
Shock	MIL-STD-202F, Method 213B, Condition B
Vibration	MIL-STD-202F, Method 204D, Condition B
Altitude	MIL-STD-202F, Method 105C, Condition B

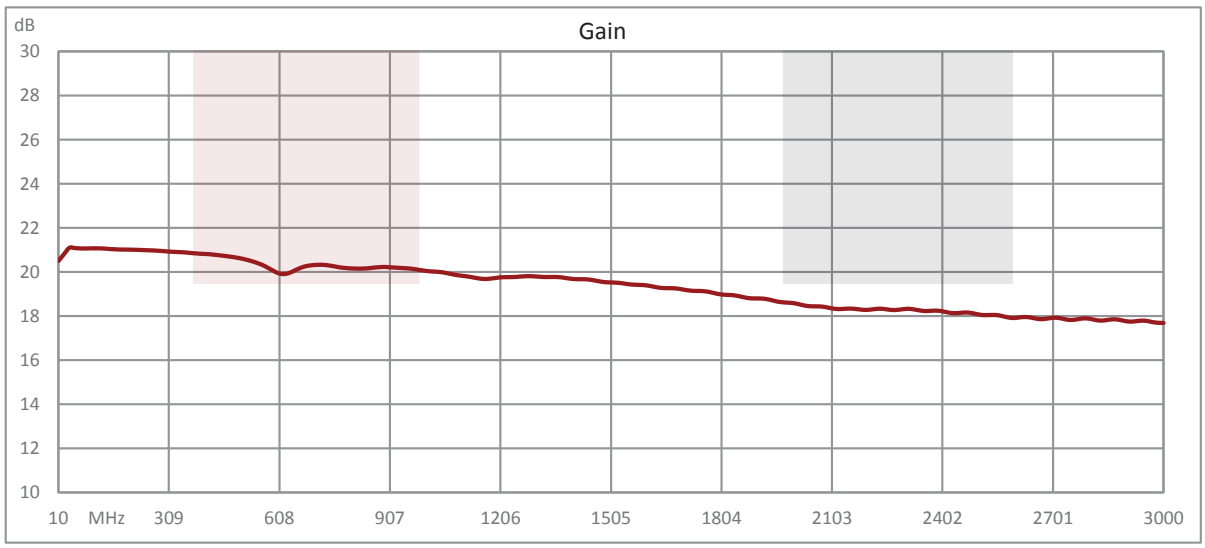
Compliance Certifications (see product page for current document)

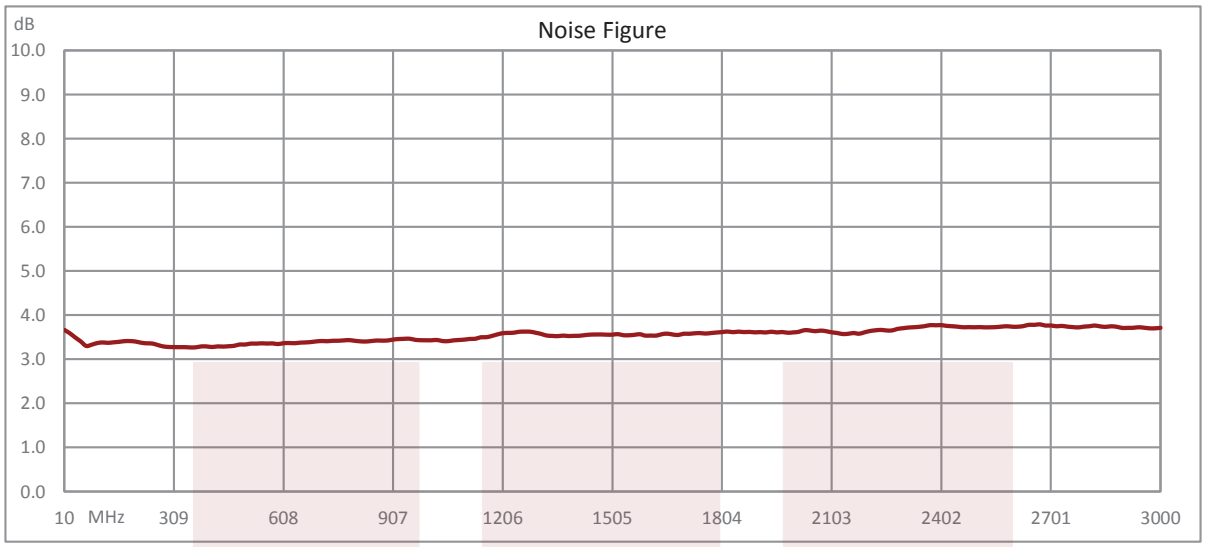
Plotted and Other Data

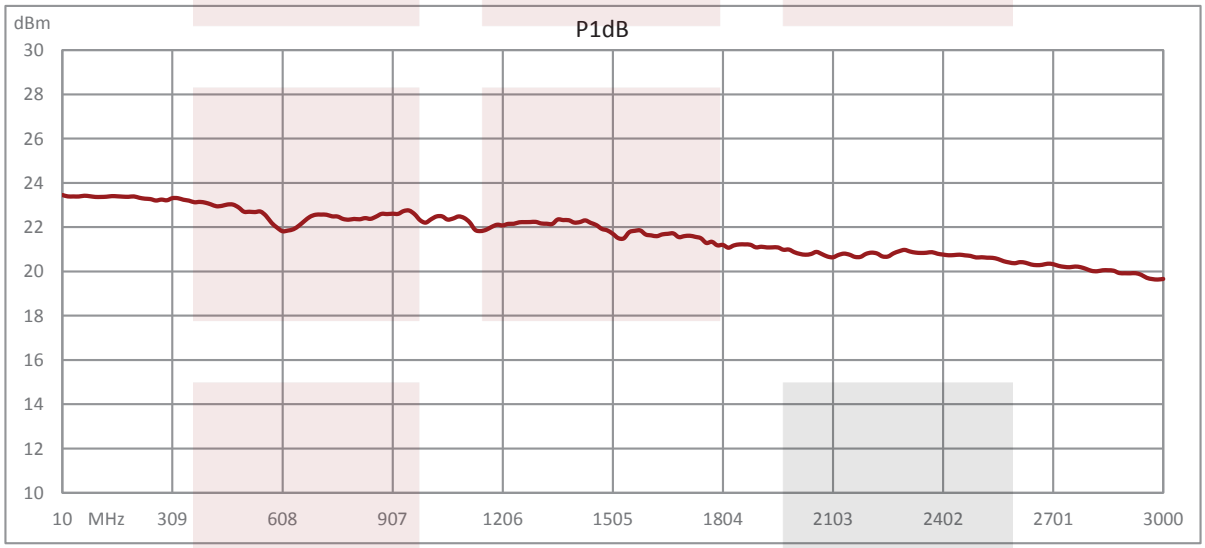
Notes:

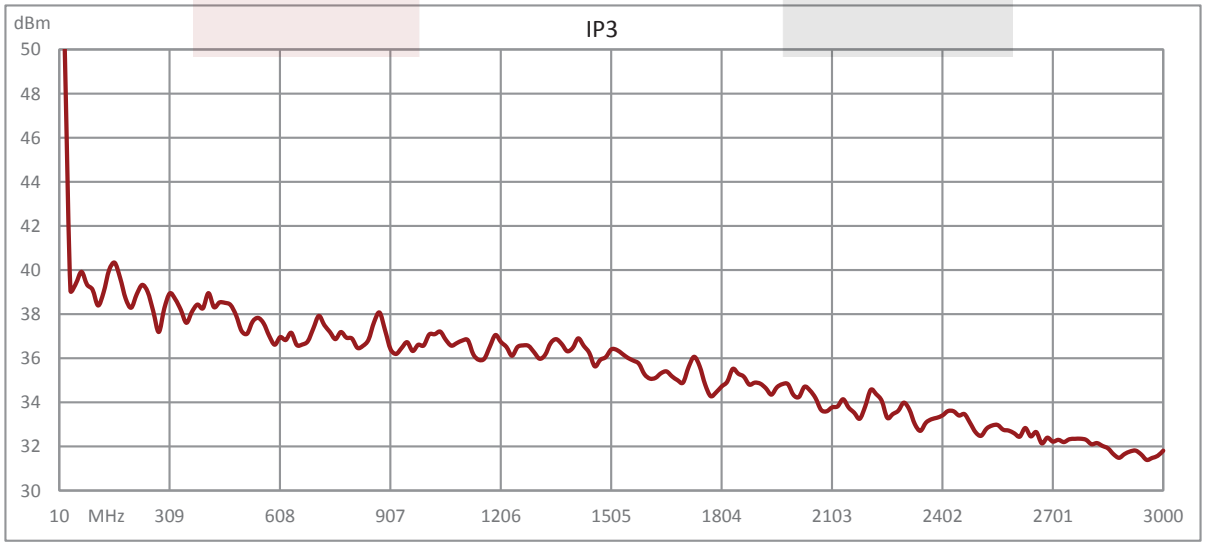
Typical Performance Data











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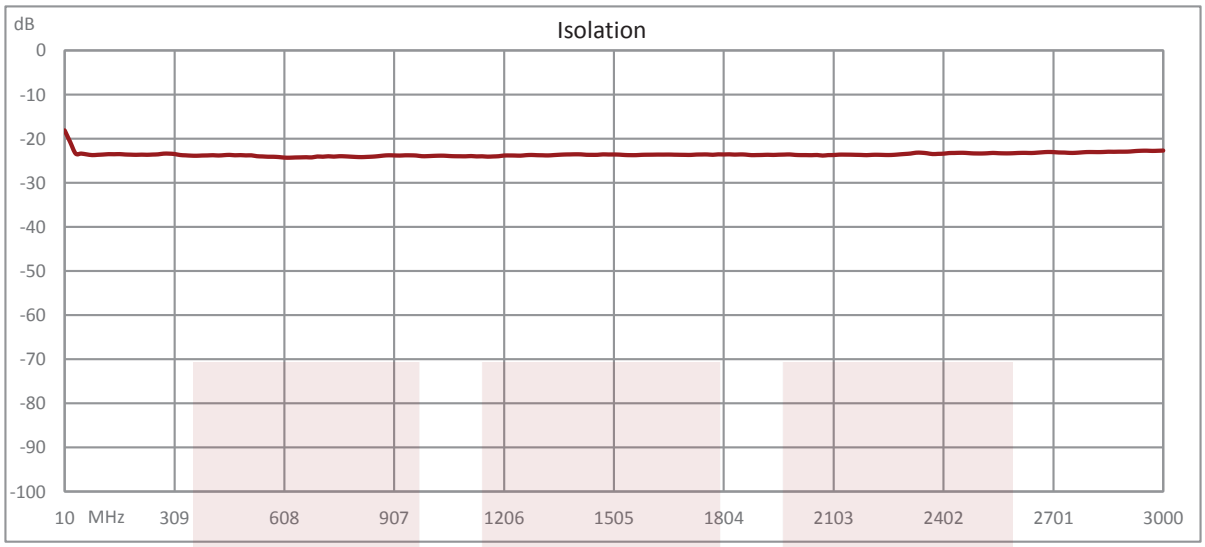
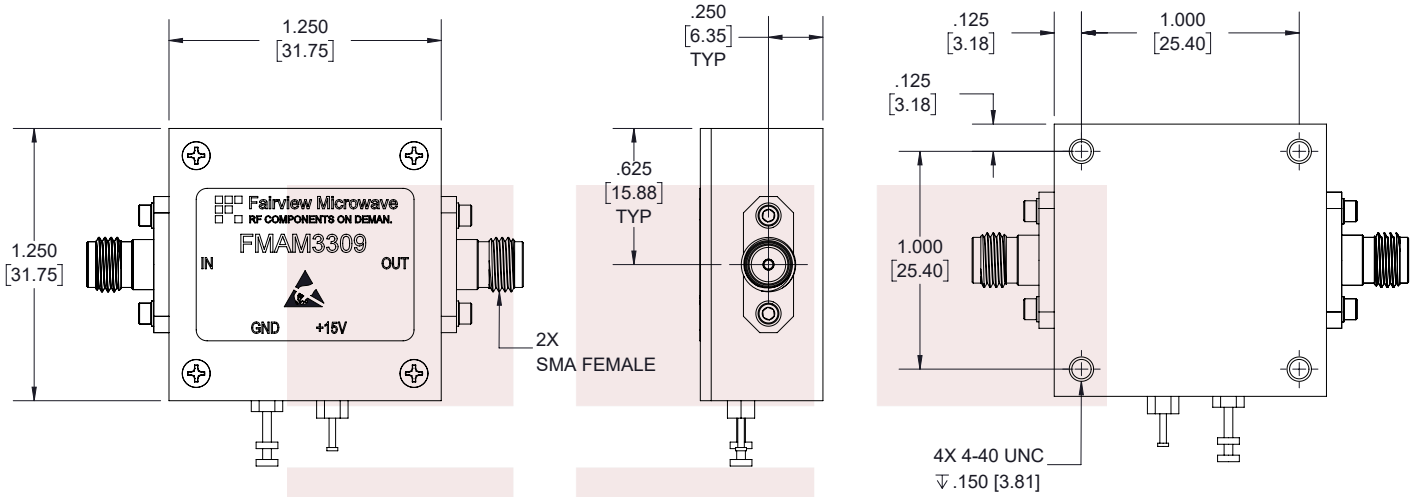
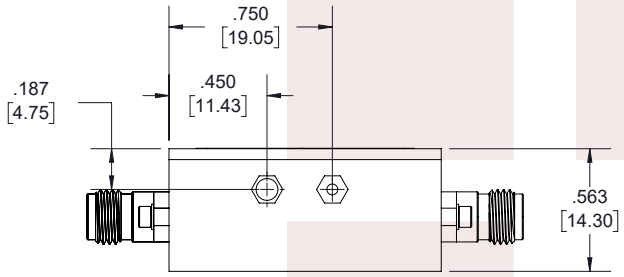


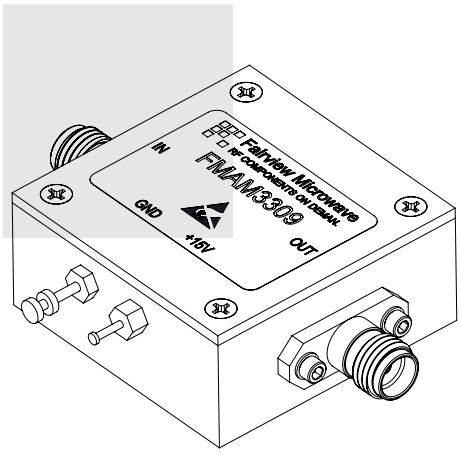
4 dB NF, 1 MHz to 3 GHz, Low Noise Broadband Amplifier with 22 dBm, 21 dB Gain, 35 dBm IP3 and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave 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

URL: https://www.fairviewmicrowave.com/1-mhz-3-ghz-low-noise-broadband-amplifier-fmam3309-p.aspx







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

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

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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	DWG NO	CAGE CODE				
4 dB NF, 1 MHz to 3 GHz, Low Noise Broadband Amplifier with 22 dBm, 21 dB Gain, 35 dBm IP3 and SMA	FMAM3309	3FKR5				
	CAD FILE 04/23/18	SHEET 1 OF 1	SCALE N/A	SIZE A	7361	

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