

4 dB NF, 0.3 MHz to 6.5 GHz, Low Noise Broadband Amplifier with 17 dBm, 39 dB Gain, 29 dBm IP3 and SMA

The FMAM3310 is a broadband coaxial power amplifier, operating in the 0.3 MHz to 6.5 GHz frequency range. Impressive broadband typical performance includes 4 dB noise figure, 16 dB small signal gain, +28 dBm P1dB, and an output 3rd order intercept point of +29 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 = 12 Vdc)

Description	Min	Typ	Max	Unit
Frequency Range	0.0003		6.5	GHz
Gain	28	39		dB
Gain Flatness		±4.5	±5.5	dB
P1dB	+15	+17		dBm
IP3	+27	+29		dBm
Reverse Isolation	-40	-45		dB
Noise Figure		4	5	dB
Input VSWR		1.4:1	2:1	
Output VSWR		1.6:1	2:1	
Operating DC Voltage 1	10	12	15	Volts
Operating DC Current		120	135	mA
Operating Temperature Range (OTR)	0		+50	°C

Performance by Frequency

Description	Minimum	Typical	Maximum	Units
Frequency Range	.3		6500	MHz
Gain				dB
Frequency = 300KHz	33.0	35.0		
Frequency = 100MHz	37.0	39.0		
Frequency = 3000MHz	33.0	35.0		
Frequency = 6500MHz	28.0	30.0		

Mechanical Specifications

Weight	0.088 lbs [39.92 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



Features:

- .3 MHz to 6.5 GHz Frequency Range
- P1dB: +28 dBm
- Small Signal Gain: 16 dB
- Gain Flatness: ±4.5 dB
- 50 Ohm Input and Output Matched
- Output IP3: +29 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

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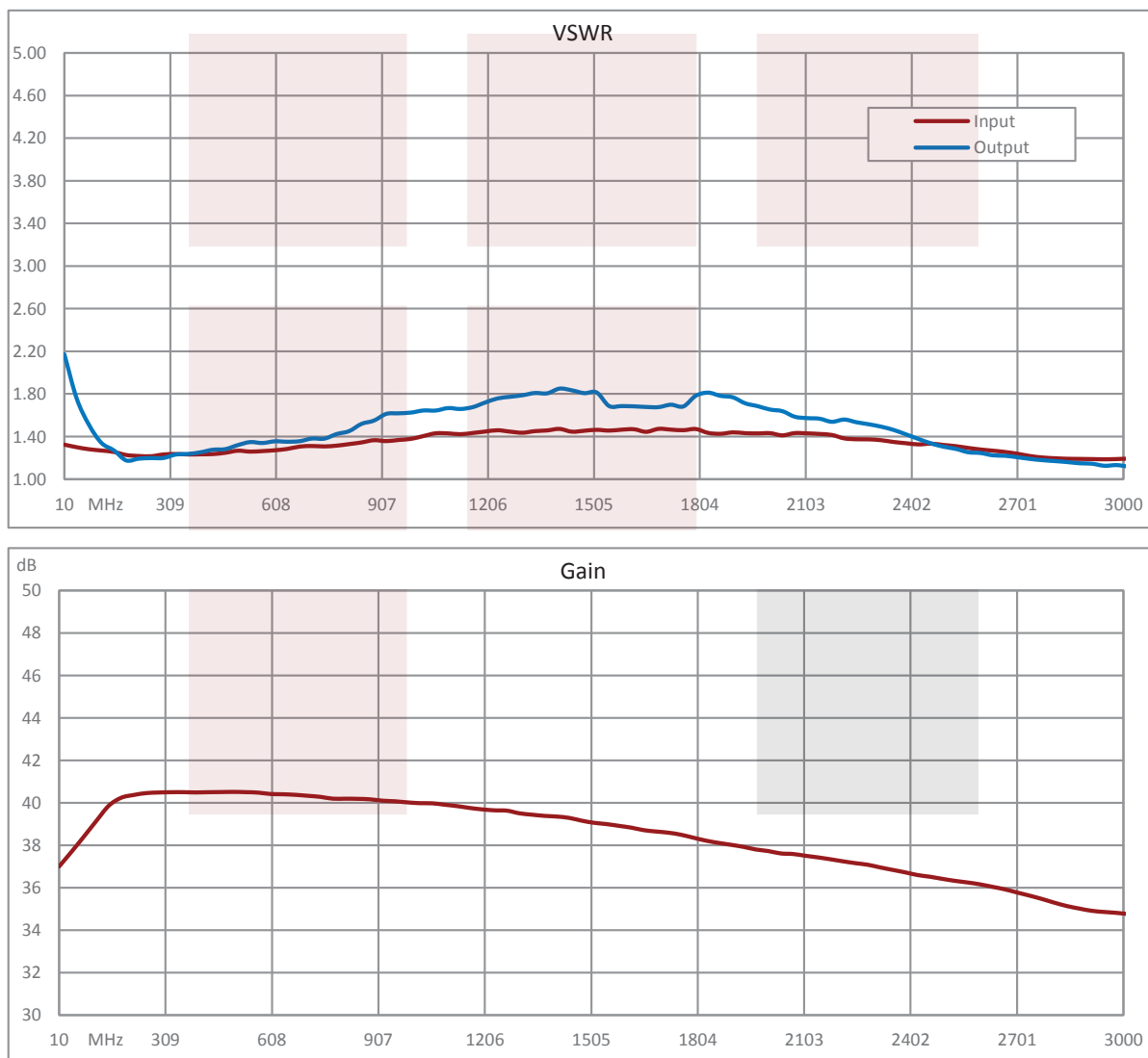
Humidity	MIL-STD-202F, Method 103B, Condition B
Shock	MIL-STD-202F, Method 213B, Condition B
Vibration	MIL-STD-202F, Method 204D, Condition B
Altitude	MIL-STD-202F, Method 105C, Condition B

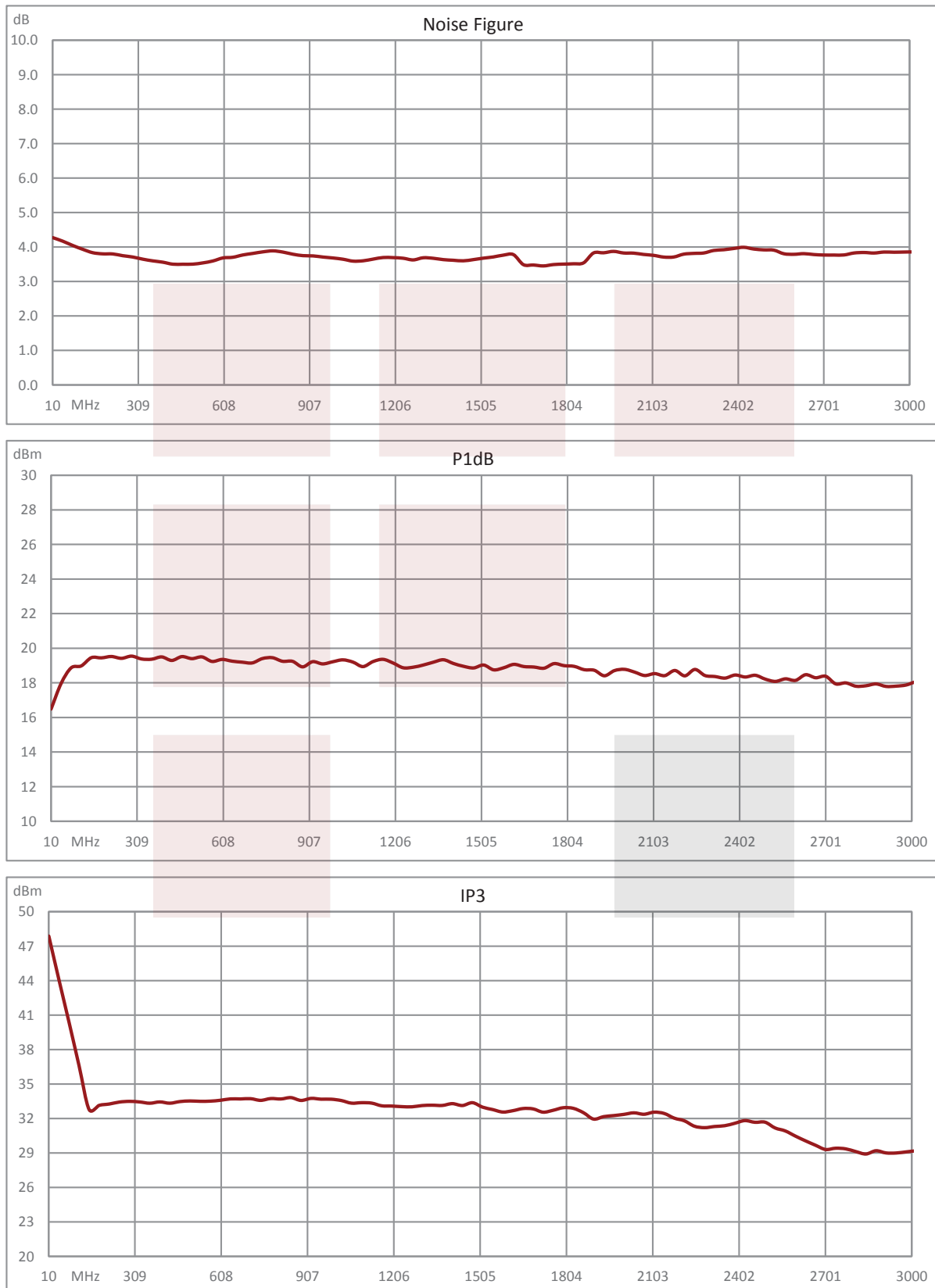
Compliance Certifications (see [product page](#) for current document)

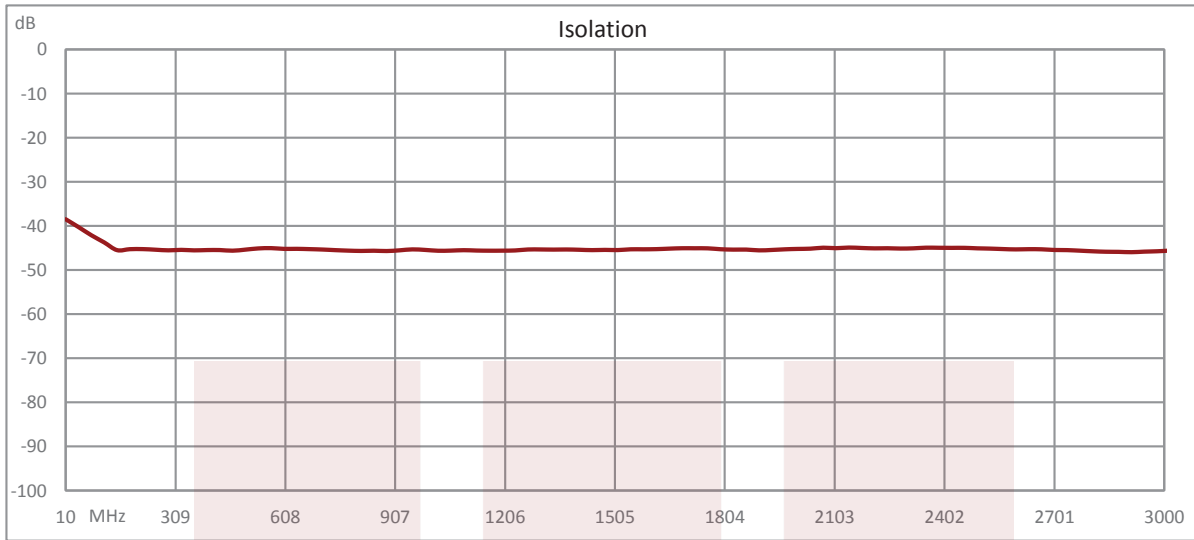
Plotted and Other Data

Notes:

Typical Performance Data





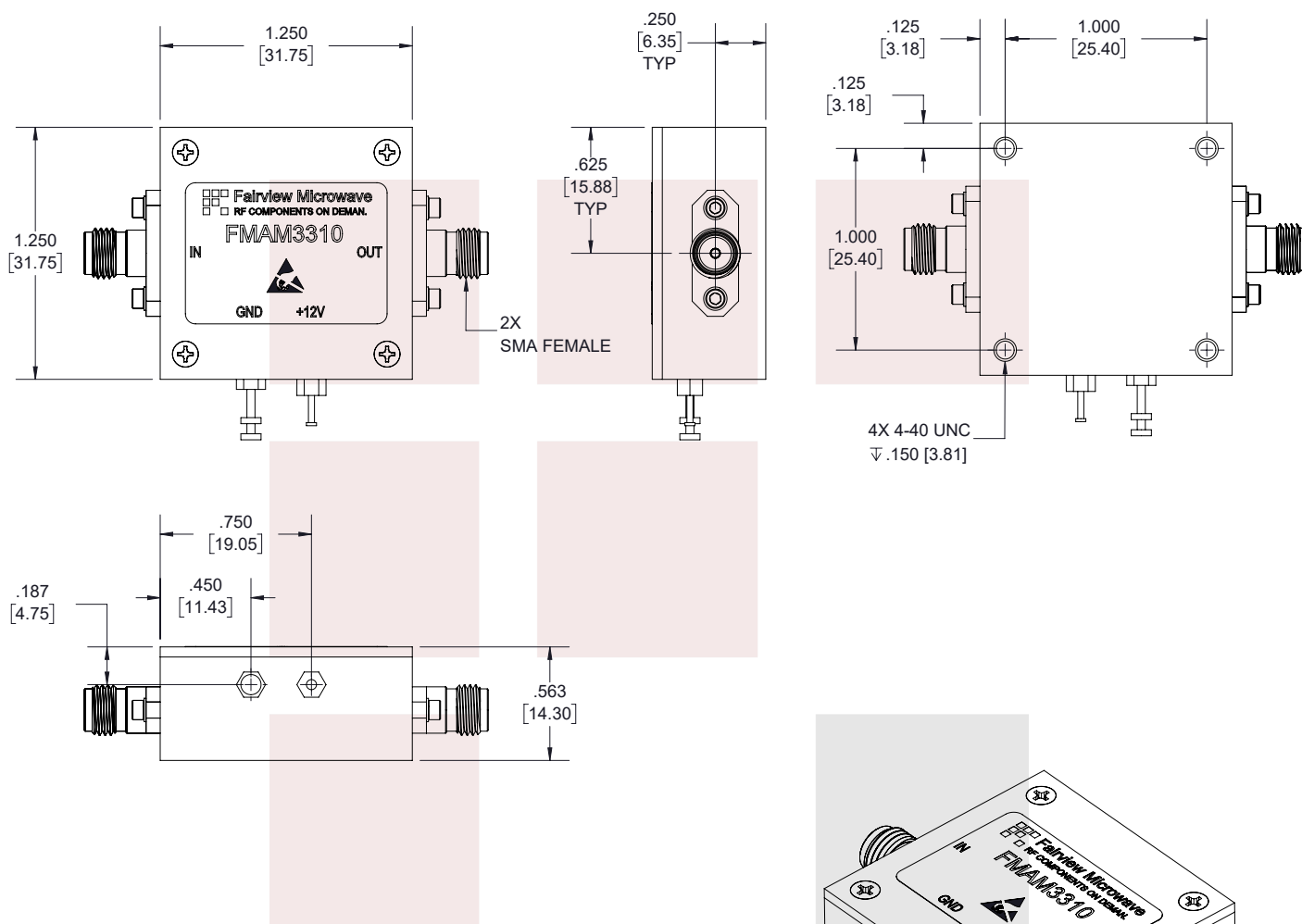


4 dB NF, 0.3 MHz to 6.5 GHz, Low Noise Broadband Amplifier with 17 dBm, 39 dB Gain, 29 dBm IP3 and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [4 dB NF, 0.3 MHz to 6.5 GHz, Low Noise Broadband Amplifier with 17 dBm, 39 dB Gain, 29 dBm IP3 and SMA FMAM3310](https://www.fairviewmicrowave.com/0.3-mhz-6.5-ghz-low-noise-broadband-amplifier-fmam3310-p.aspx)

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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.



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

4 dB NF, 0.3 MHz to 6.5 GHz, Low Noise Broadband
Amplifier with 17 dBm, 39 dB Gain, 29 dBm IP3 and
SMA

DWG NO

FMAM3310

CAGE CODE

3FKR5

CAD FILE

04/23/18

SHEET

1 OF 1

SCALE N/A

SIZE A

7361