Fairview Microwave
an INFINITE brand

FMAM3311
DATA SHEET

5 dB NF, 0.1 MHz to 10 GHz, Low Noise Broadband Amplifier with 13 dBm, 32.5 dB Gain, 26 dBm IP3 and SMA

The FMAM3311 is a broadband coaxial power amplifier, operating in the 0.1 MHz to 10 GHz frequency range. Impressive broadband typical performance includes 5 dB noise figure, 18 dB small signal gain, +11 dBm P1dB, and an output 3rd order intercept point of +26 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	0.0001		10	GHz
Gain	18	32.5		dB
Gain Flatness		±6.5	±7.5	dB
P1dB*	+11	+13		dBm
IP3*	+24	+26		dBm
Reverse Isolation*	-33	-39		dB
Noise Figure*		5	6	dB
Input VSWR*		1.7:1	2:1	
Output VSWR*		1.7:1	2:1	
Operating DC Voltage 1	10	12	18	Volts
Operating DC Current		110		mA
Operating Temperature Range (OTR)	0		+50	°C

Performance by Frequency

Description	Min	Typ	Max	Units
Frequency Range	0.1		10,000	MHz
Gain				
Frequency = 100KHz	27.0		29.0	
Frequency = 10MHz	28.0		30.0	
Frequency = 100MHz	30.0		32.5	dB
Frequency = 5000MHz	25.0		27.0	
Frequency = 10000MHz	18.0		20.0	

Electrical Specification Notes:
*Frequency = 5 GHz

Mechanical Specifications

Weight	0.0949 lbs [43.05 g]
Input Connector	SMA Female
Output Connector	SMA Female

Features:

- .1 MHz to 10 GHz Frequency Range
- P1dB: +11 dBm
- Small Signal Gain: 18 dB
- Gain Flatness: ±6.5 dB
- 50 Ohm Input and Output Matched
- Output IP3: +26 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

Fairview Microwave
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Environmental Specifications

Temperature

Operating Range	0 to +50 deg C
Storage Range	-40 to +100 deg C
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

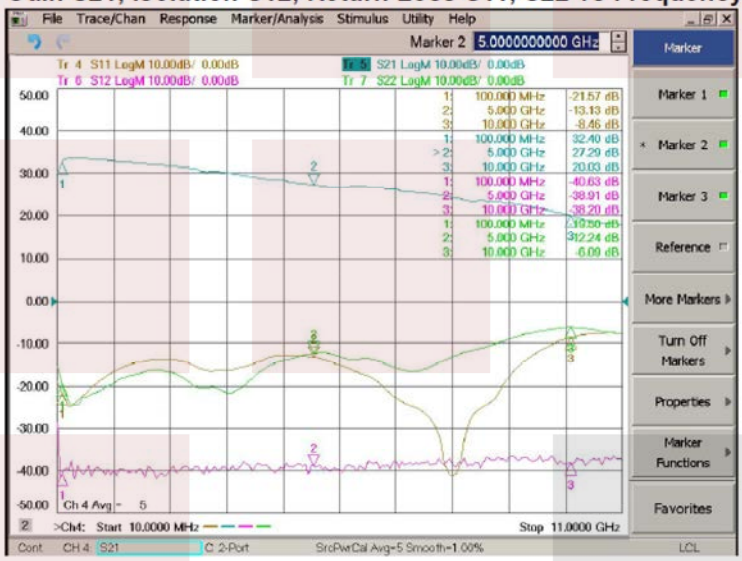
Compliance Certifications (see product page for current document)

Plotted and Other Data

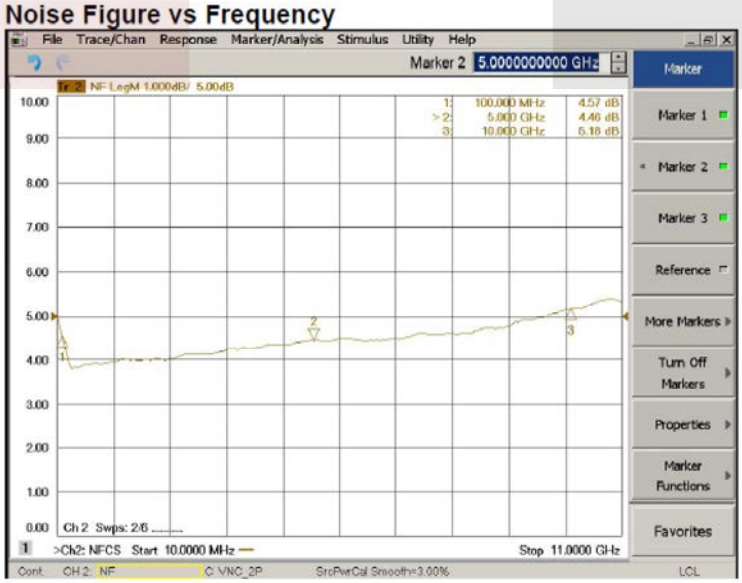
Notes:

Typical Performance Data

Gain S21, Isolation S12, Return Loss S11, S22 vs Frequency

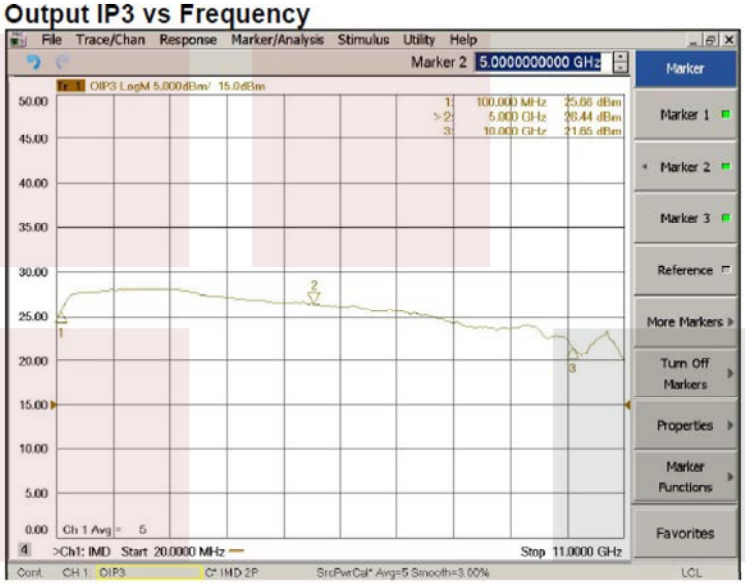


Noise Figure vs Frequency



Output P1dB vs Frequency

Output IP3 vs Frequency



5 dB NF, 0.1 MHz to 10 GHz, Low Noise Broadband Amplifier with 13 dBm, 32.5 dB Gain, 26 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 Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: 5 dB NF, 0.1 MHz to 10 GHz, Low Noise Broadband Amplifier with 13 dBm, 32.5 dB Gain, 26 dBm IP3 and SMA FMAM3311

URL: https://www.fairviewmicrowave.com/0.1-mhz-10-ghz-low-noise-broadband-amplifier-fmam3311-p.aspx

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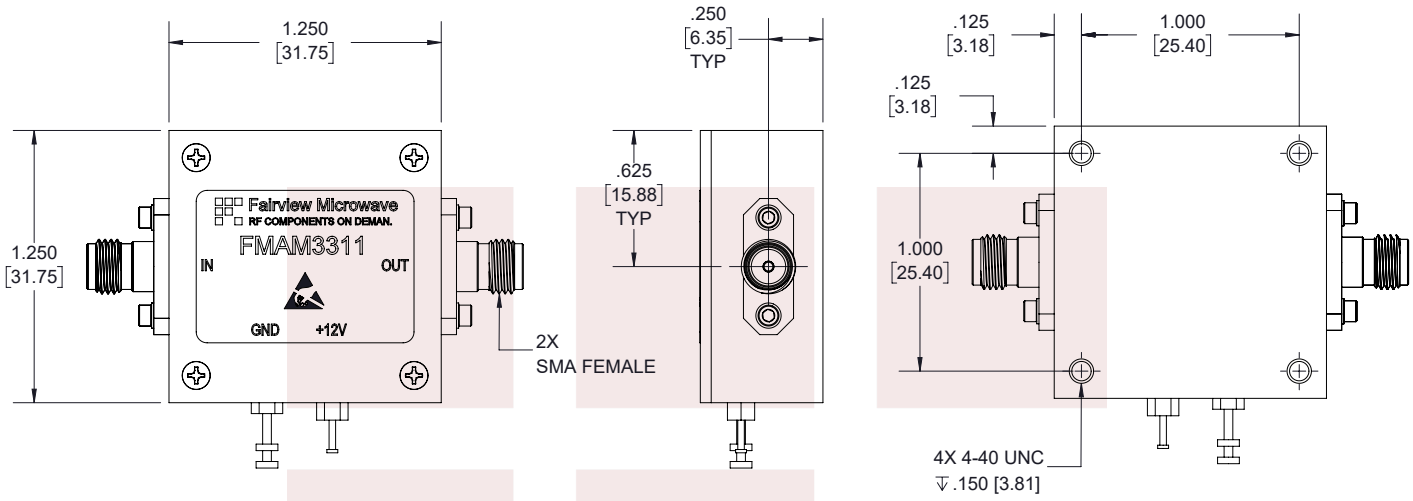

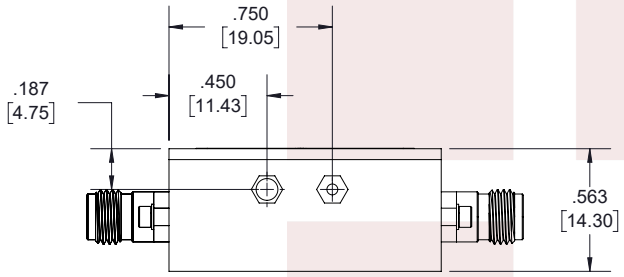

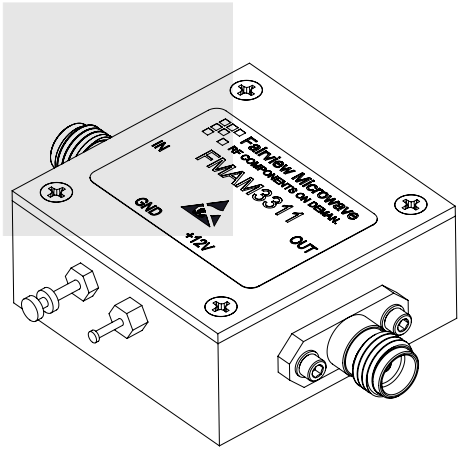

STANDARD TOLERANCES	
.X	±0.2
.XX	±0.01
.XXX	±0.005

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

Fairview Microwave RF COMPONENTS ON DEMAND. Done!

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

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DWG NO	CAGE CODE
FMAM3311	3FKR5

CAD FILE	04/23/18	SHEET	1 OF 1	SCALE	N/A	SIZE	A	7361

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