

2.5 dB NF, 6 GHz to 18 GHz, Low Noise Broadband Amplifier with 10 dBm, 30 dB Gain and SMA

FMAM3294 is a broadband coaxial low noise amplifier, operating in the 6 to 18 GHz frequency range. The amplifier offers 10 dBm of P1dB min and 30 dB small signal gain min, with the gain flatness of ± 2.0 dB max and a Noise Figure of 2.5 dB. This low noise amplifier requires only a single positive DC supply, is unconditionally stable, operates over the temperature range of -20°C to 85°C , and is Hermetically sealed.

Electrical Specifications (TA= 25°C, VDC1 = 12 Vdc)

Description	Min	Typ	Max	Unit
Frequency Range	6		18	GHz
Gain	30			dB
P1dB	+10			dBm
Noise Figure		2.5		dB
Operating DC Voltage 1	11	12	13	Volts
Operating DC Current		200		mA
Operating Temperature Range (OTR)	-40		+80	$^{\circ}\text{C}$

Absolute Maximum Rating

Parameter	Rating	Units
Source Voltage	+15	Volts
RF input Power	+17	dBm
Operating Temperature (base-plate)	-30 to +70	$^{\circ}\text{C}$
Storage Temperature	-55 to +85	$^{\circ}\text{C}$



ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in approved ESD Workstation.

Mechanical Specifications

Size	
Length	1.083 in [27.51 mm]
Width	1.093 in [27.76 mm]
Height	0.382 in [9.7 mm]
Weight	0.0075 lbs [3.4 g]
Input Connector	SMA Female
Output Connector	SMA Female

Environmental Specifications

Temperature	
Operating Range	-40 to +80 deg C



Features:

- 6 to 18 GHz Frequency Range
- P1dB: 10 dBm min
- Small Signal Gain: 30 dB min
- Gain Flatness: ± 2.0 dB max
- Noise Figure: 2.5 dB max
- 50 Ohm Input and Output Matched
- -20 to $+85^{\circ}\text{C}$ Operating Temperature
- Unconditionally Stable
- Single DC Positive Supply
- Built-in DC Voltage Regulator

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

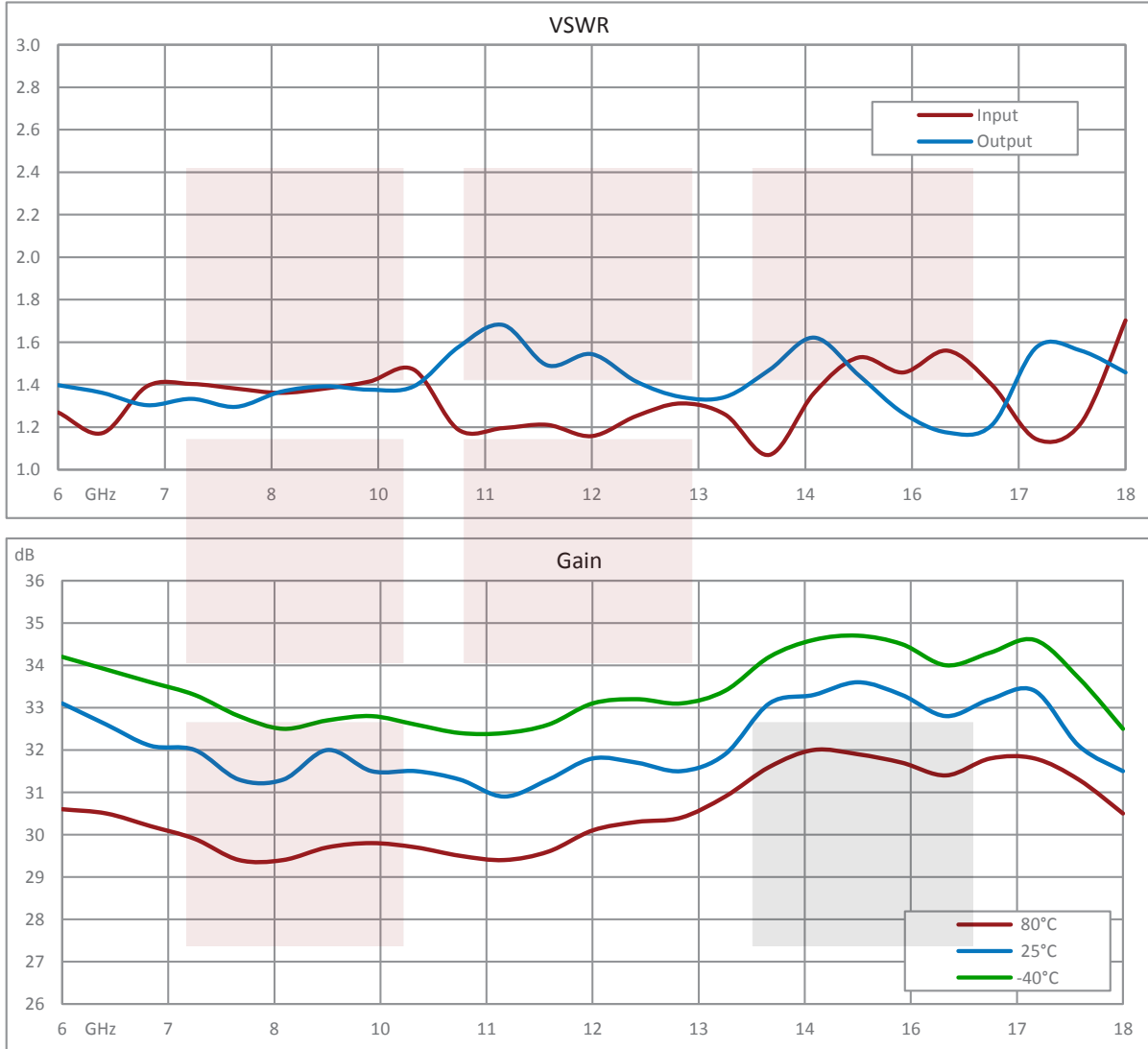
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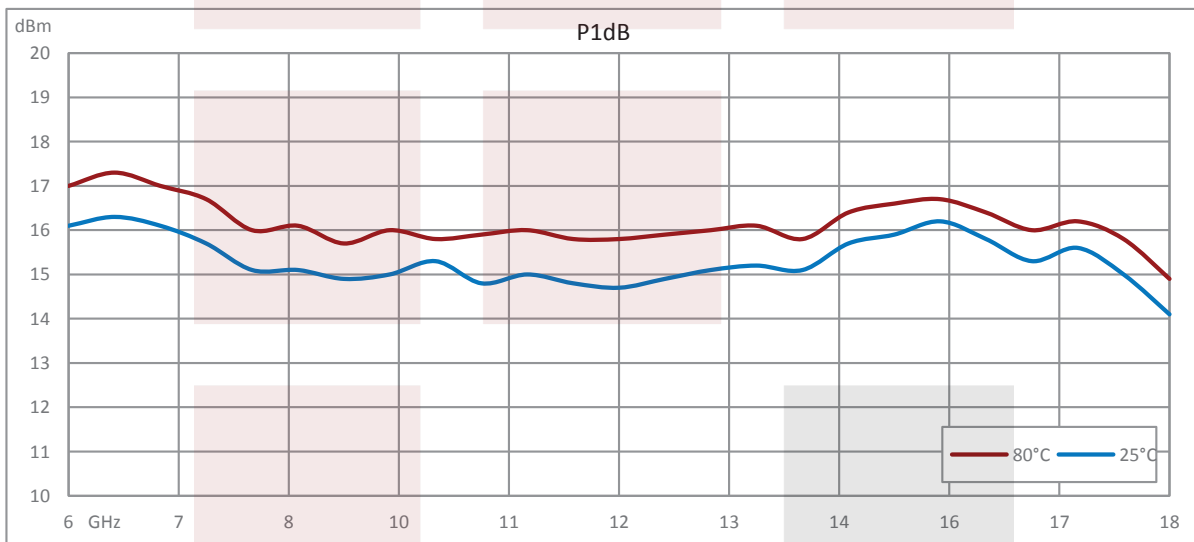
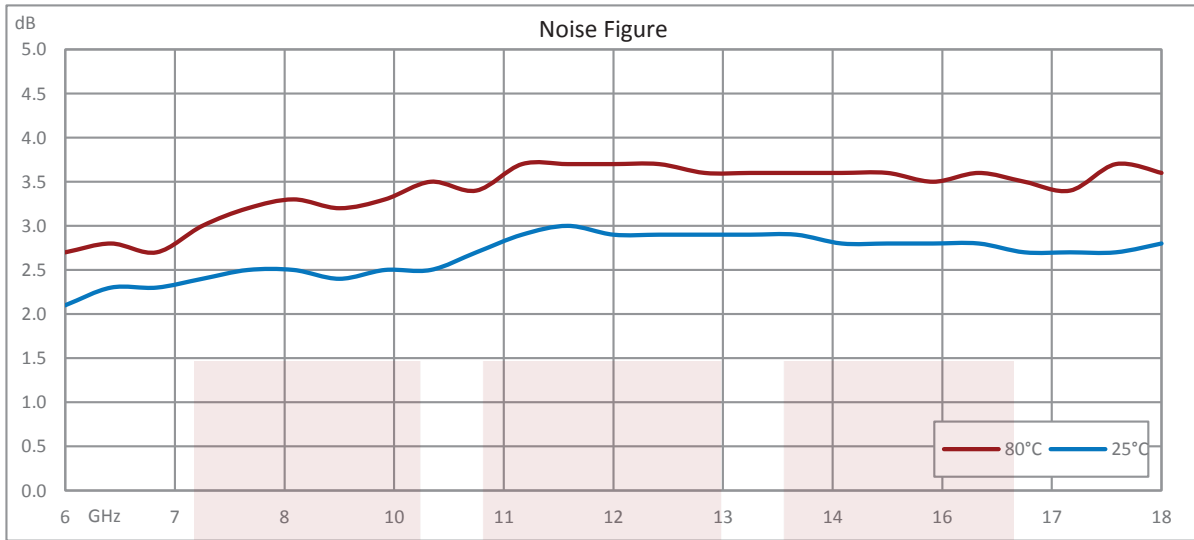
Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

Typical Performance Data



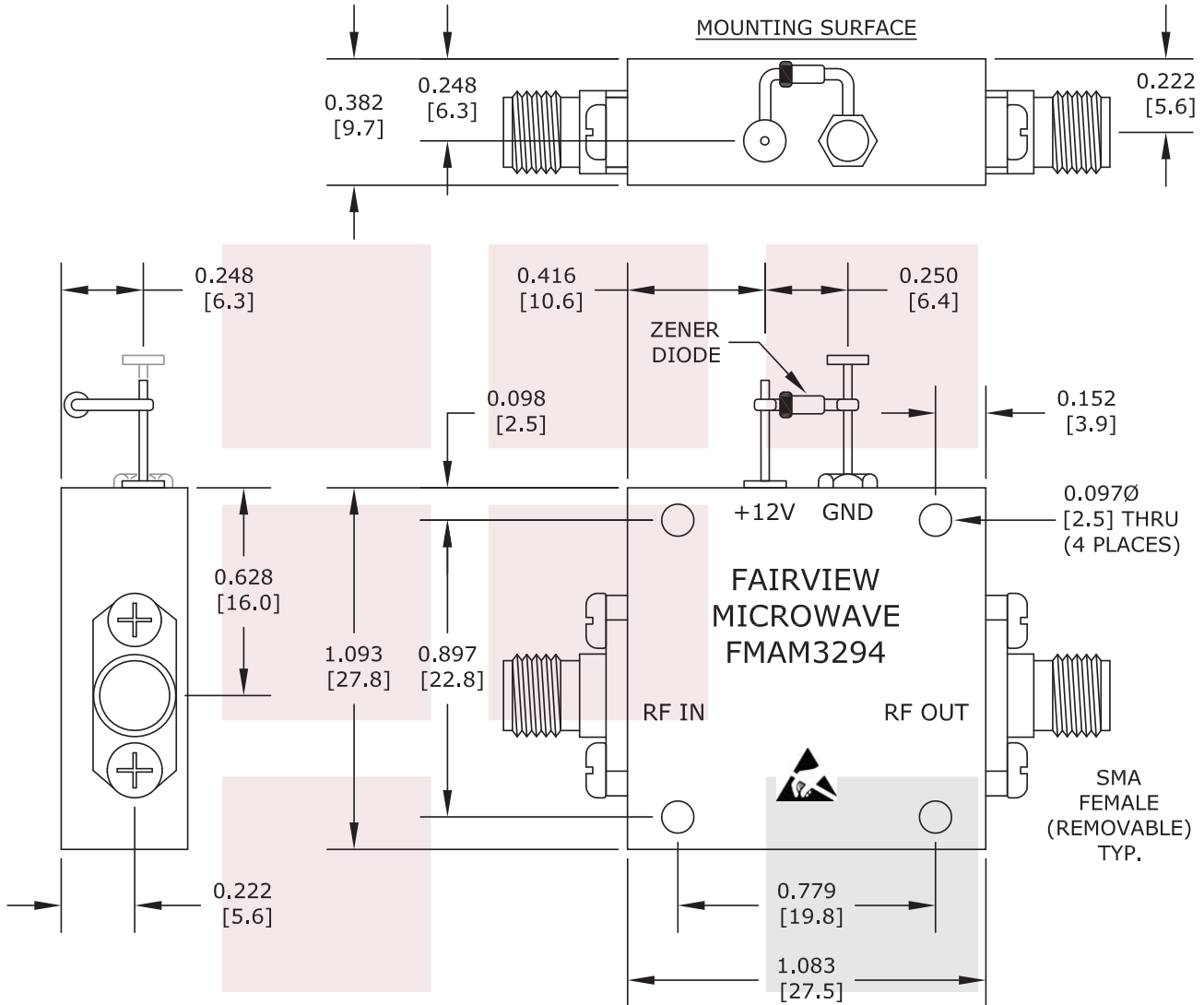


2.5 dB NF, 6 GHz to 18 GHz, Low Noise Broadband Amplifier with 10 dBm, 30 dB Gain and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [2.5 dB NF, 6 GHz to 18 GHz, Low Noise Broadband Amplifier with 10 dBm, 30 dB Gain and SMA FMAM3294](https://www.fairviewmicrowave.com/6-18-ghz-low-noise-broadband-amplifier-fmam3294)

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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.



NOTE:
HEAT SINK REQUIRED FOR PROPER OPERATION,
UNIT IS COOLED BY CONDUCTING TO HEAT SINK.

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TITLE 2.5 dB NF, 6 GHz to 18 GHz, Low Noise Broadband Amplifier with 10 dBm, 30 dB Gain and SMA		DWG NO FMAM3294		CAGE CODE 3FKR5	
CAD FILE	032116	SHEET	SCALE	N/A	SIZE A 2233