

## 6 GHz to 12 GHz, Medium Power Broadband Amplifier with 500 mW, 28 dB Gain and SMA

FMAM4045 is a broadband coaxial power amplifier, operating in the 6.0 to 12.0 GHz frequency range. The amplifier offers 27 dBm of P1dB min and 28 dB small signal gain typ, with the gain flatness of  $\pm 0.8$  dB typ. This power amplifier requires only a single positive DC supply, is unconditionally stable, operates over the temperature range of  $-30^{\circ}\text{C}$  to  $70^{\circ}\text{C}$ , and is Hermetically sealed.

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

Description	Min	Typ	Max	Unit
Frequency Range	6		12	GHz
Gain	25	28		dB
Gain Flatness		$\pm 0.8$	$\pm 1$	dB
P1dB	+27			dBm
IP3	+37			dBm
Noise Figure		5		dB
Input VSWR			2:1	
Output VSWR			2:1	
Operating DC Voltage 1	11	12	15	Volts
Operating DC Current		450	500	mA
Operating Temperature Range (OTR)	-30		+70	$^{\circ}\text{C}$

### Mechanical Specifications

<b>Size</b>	
Length	1.333 in [33.86 mm]
Width	1.093 in [27.76 mm]
Height	0.382 in [9.7 mm]
Weight	0.076 lbs [34.47 g]
Input Connector	SMA Female
Output Connector	SMA Female

### Environmental Specifications

<b>Temperature</b>	
Operating Range	$-30$ to $+70$ deg C

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

### Plotted and Other Data

Notes:



### Features:

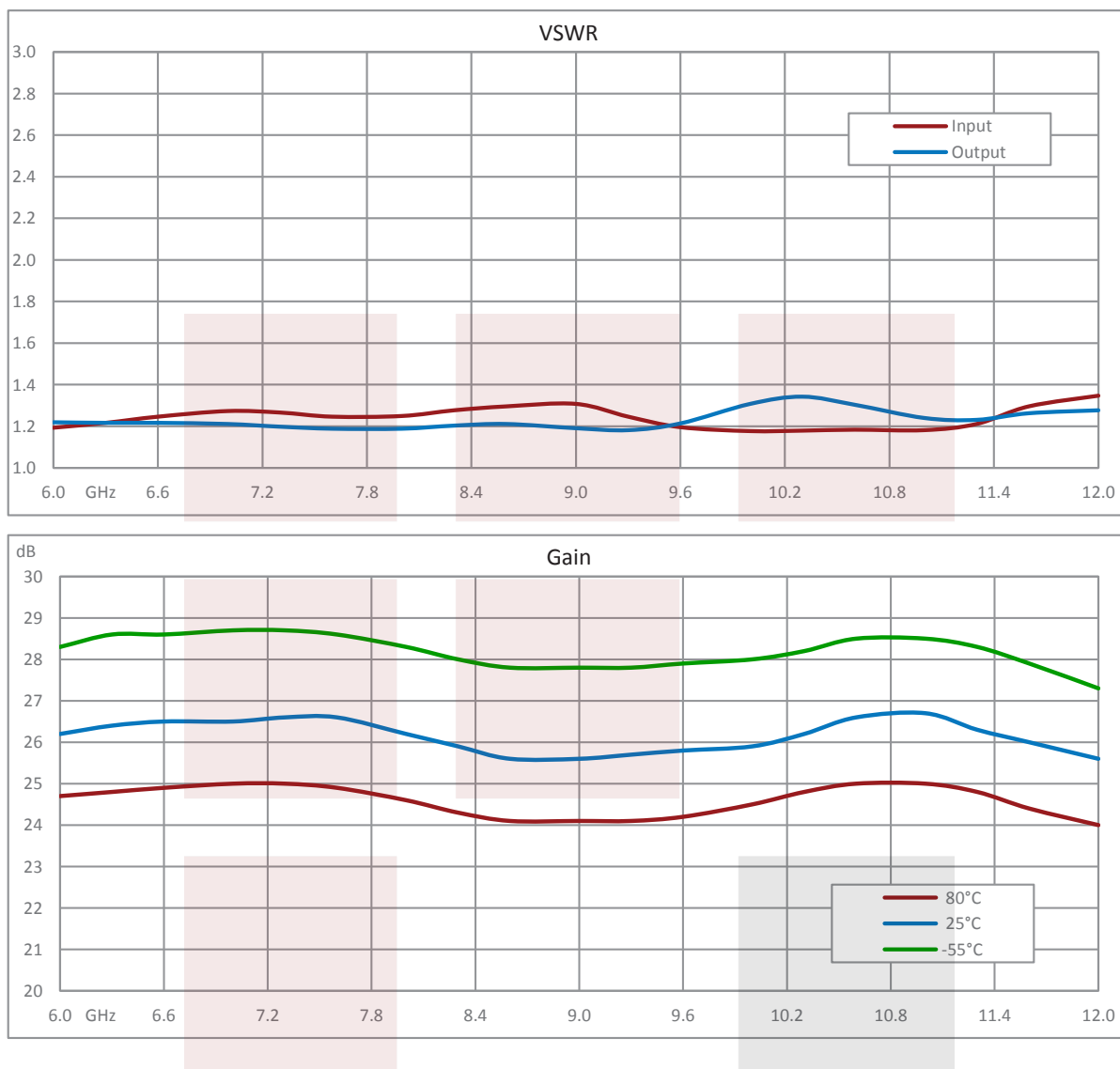
- 6.0 to 12.0 GHz Frequency Range
- P1dB: 27 dBm min
- Small Signal Gain: 28 dB typ
- Gain Flatness:  $\pm 0.8$  dB typ
- 50 Ohm Input and Output Matched
- $-30$  to  $+70^{\circ}\text{C}$  Operating Temperature
- Unconditionally Stable
- Single DC Positive Supply
- Built-in DC Voltage Regulator

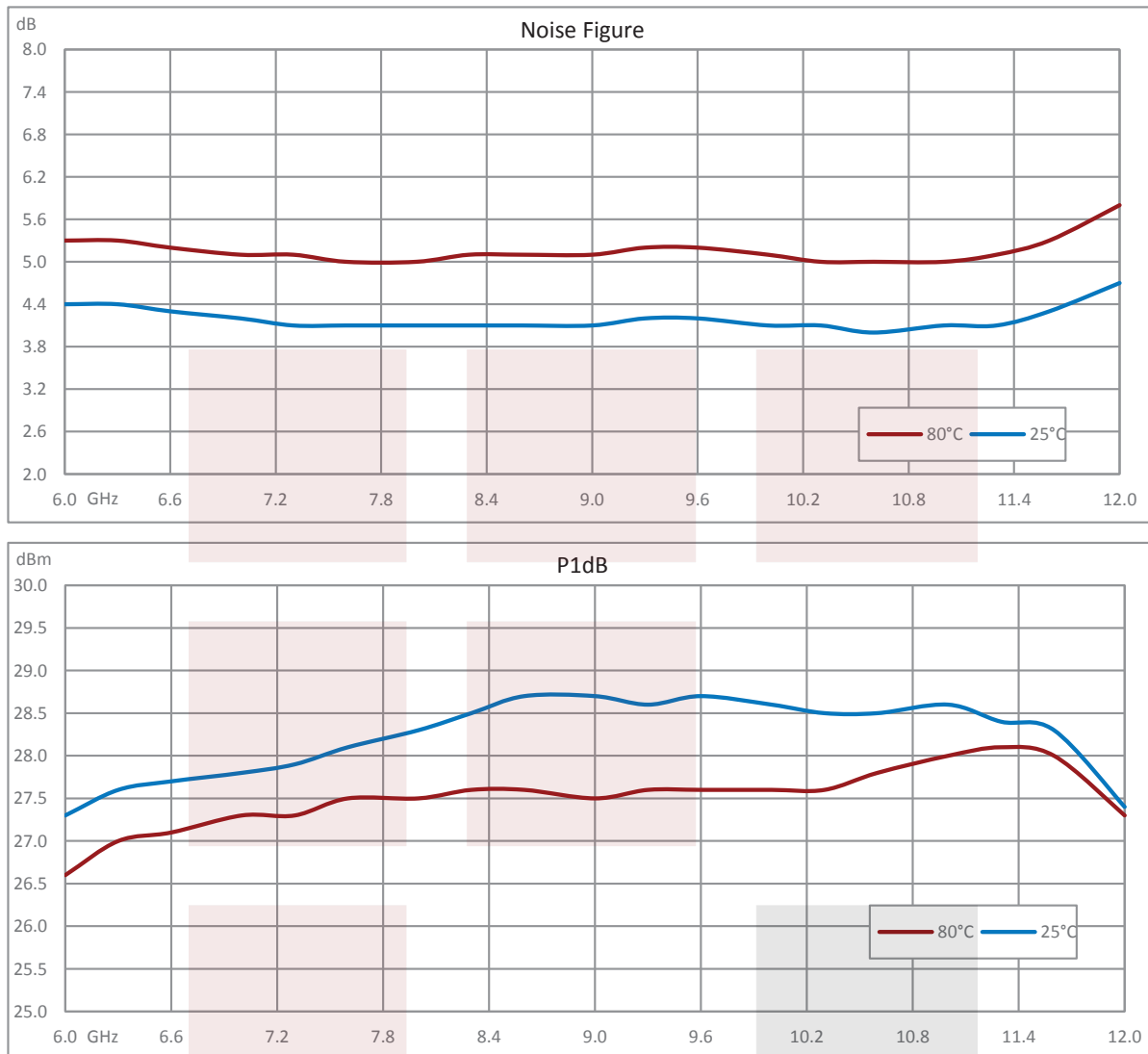
### Applications:

- 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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**Typical Performance Data**



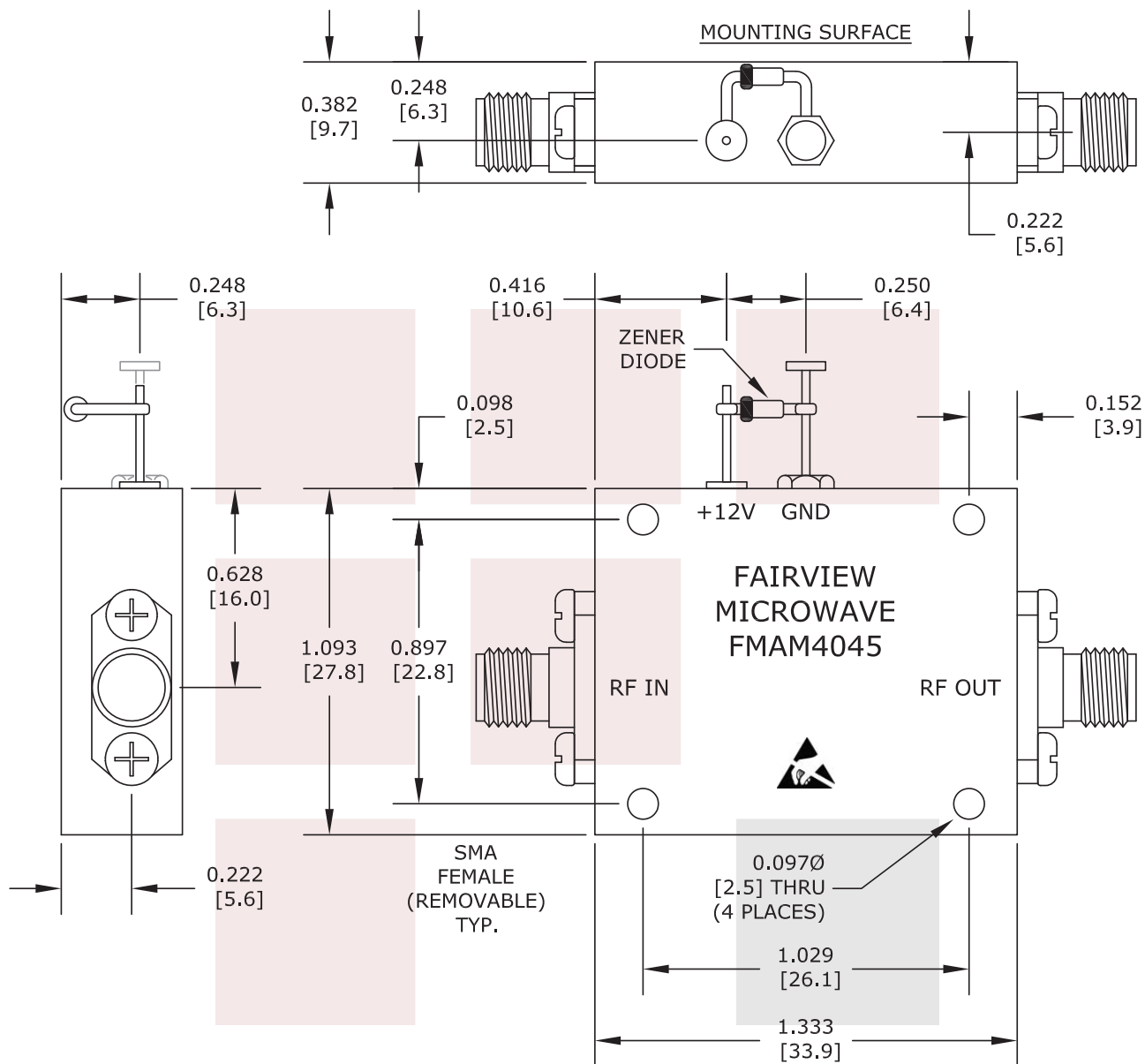


6 GHz to 12 GHz, Medium Power Broadband Amplifier with 500 mW, 28 dB Gain and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [6 GHz to 12 GHz, Medium Power Broadband Amplifier with 500 mW, 28 dB Gain and SMA FMAM4045](https://www.fairviewmicrowave.com/6-12-ghz-medium-power-broadband-amplifier-fmam4045-p.aspx)

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

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<b>TITLE</b> 6 GHz to 12 GHz, Medium Power Broadband Amplifier with 500 mW, 28 dB Gain and SMA		<b>DWG NO</b> FMAM4045		<b>CAGE CODE</b> 3FKR5	
<b>CAD FILE</b> 032316		<b>SHEET</b>		<b>SCALE</b> N/A	<b>SIZE</b> A 2233