Fairview Microwave
RF COMPONENTS ON DEMAND. Done!

FMAM8005
DATA SHEET

50 dB Gain Block Amplifier Operating From 500 MHz to 2 GHz with 15 dBm P1dB and SMA

The PE15A8005 is wideband general purpose RF coaxial gain block amplifier operating in the 0.01 GHz to 6 GHz frequency range. The amplifier offers 14 dBm typ of P1dB, 14.5 dB typ of Gain, OIP3 typ of 16 dBm. This exceptional technical performance is achieved through the use of hybrid MIC design and advanced GaAs PHEMT devices. This gain block amplifier requires only a single positive supply, typically a +12V DC power supply and includes built-in voltage regulation, is unconditionally stable and operates over the temperature range of -40°C and +75°C.

Electrical Specifications (TA = +25°C, DC Voltage = 12Volts,)

Description	Min	Typ	Max	Unit
Frequency Range	0.5		2	GHz
Small Signal Gain	45	50		dB
Gain Flatness		±1.8		dB
Output at 1 dB Compression Point		+15		dBm
Output 3rd Intercept Point		+25		dBm
Input VSWR			2:1	
Output VSWR			2:1	
Operating DC Voltage		12		Volts
Operating Temperature Range	-30		+70	°C

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	0.0765 lbs [34.7 g]
Input Connector	SMA Female
Output Connector	SMA Female

Environmental Specifications

Temperature

Operating Range	-30 to +70 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

- Values at 25 °C, sea level
- ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in approved ESD Workstation.

Features:

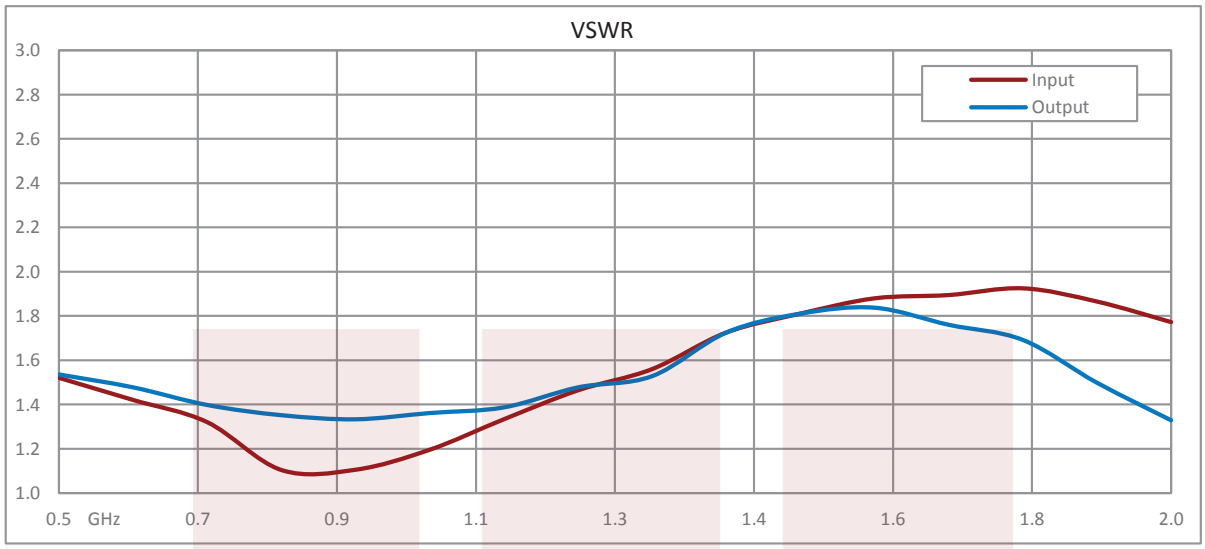
- 10 MHz to 6 GHz Frequency Range
- P1dB: 14 dBm
- Small Signal Gain: 14.5 dB
- OIP3: 26 dBm
- 50 Ohm Input and Output Matched
- -40 to +75°C Operating Temperature
- Unconditionally Stable
- Single DC Positive Supply
- Built-in Voltage Regulator

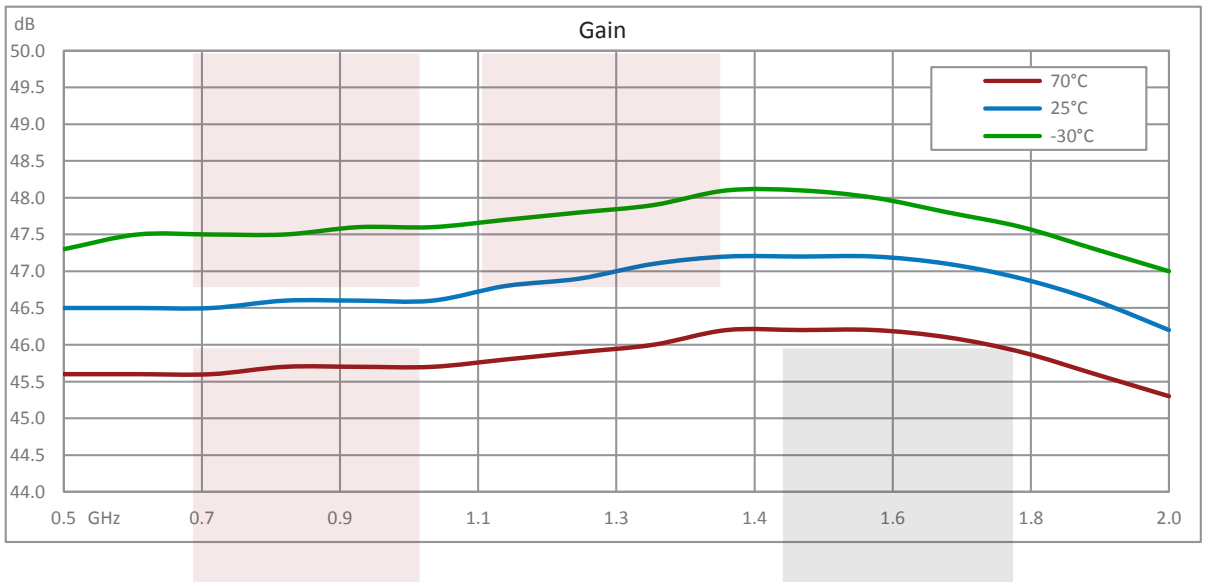
Applications:

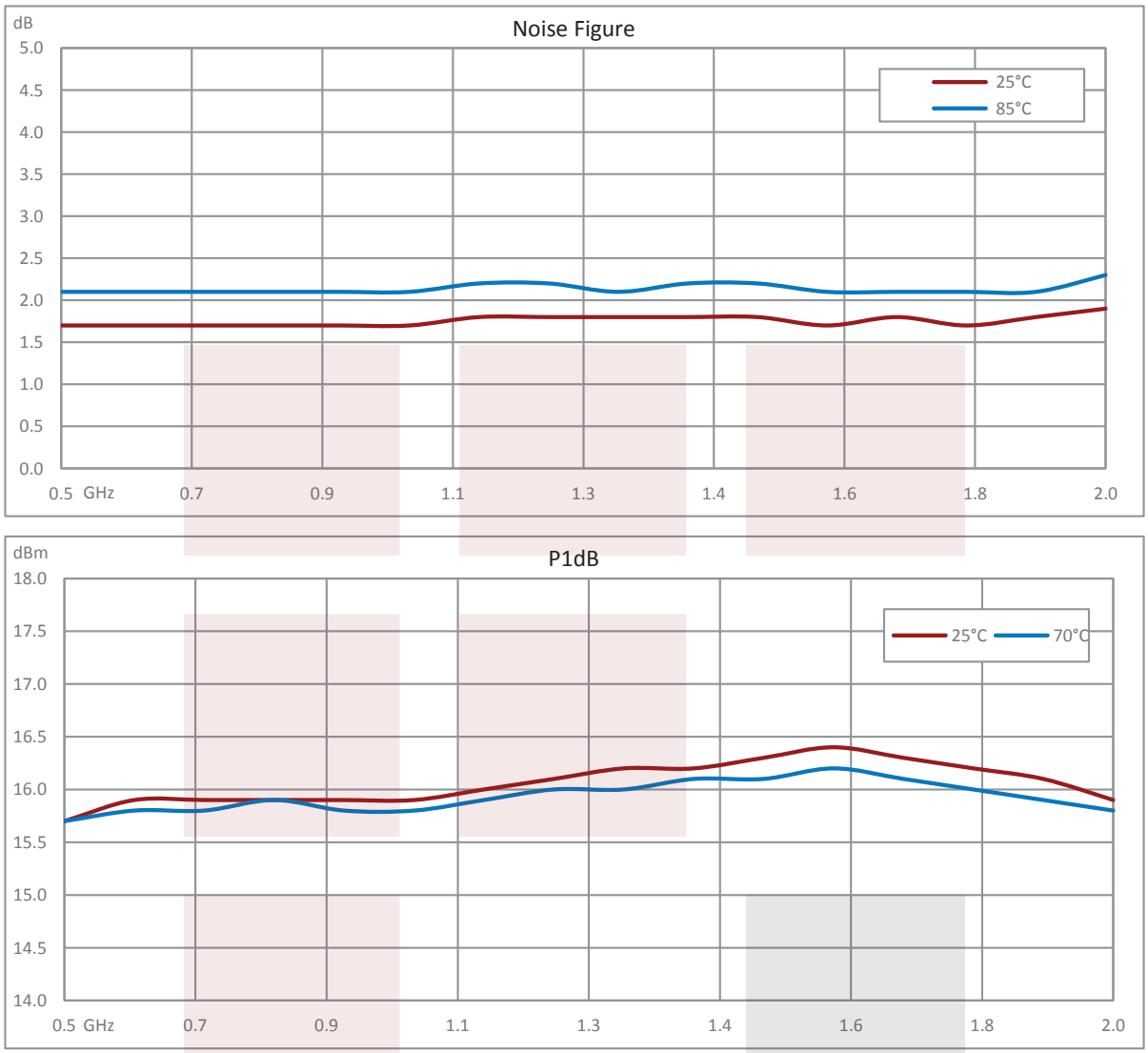
- Laboratory Applications
- R&D Labs
- Military Radio
- Radar Systems
- Telecom Infrastructure
- Test Instrumentation
- Military & Space
- Communication Systems
- Wireless Communication
- Microwave Radio Systems
- Cellular Base Stations
- Low Noise Amplifier
- General Purpose Amplification
- General Purpose Wireless
- Wideband Gain Block
- IF Amplifier/RF Driver Amplifier
- RF Wideband Front Ends
- RF Pre-amplification

Fairview Microwave
1130 Junction Dr. #100
Allen, TX 75013
Tel: 1-800-715-4396 / (972) 649-6678
Fax: (972) 649-6689
www.fairviewmicrowave.com
sales@fairviewmicrowave.com

Typical Performance Data



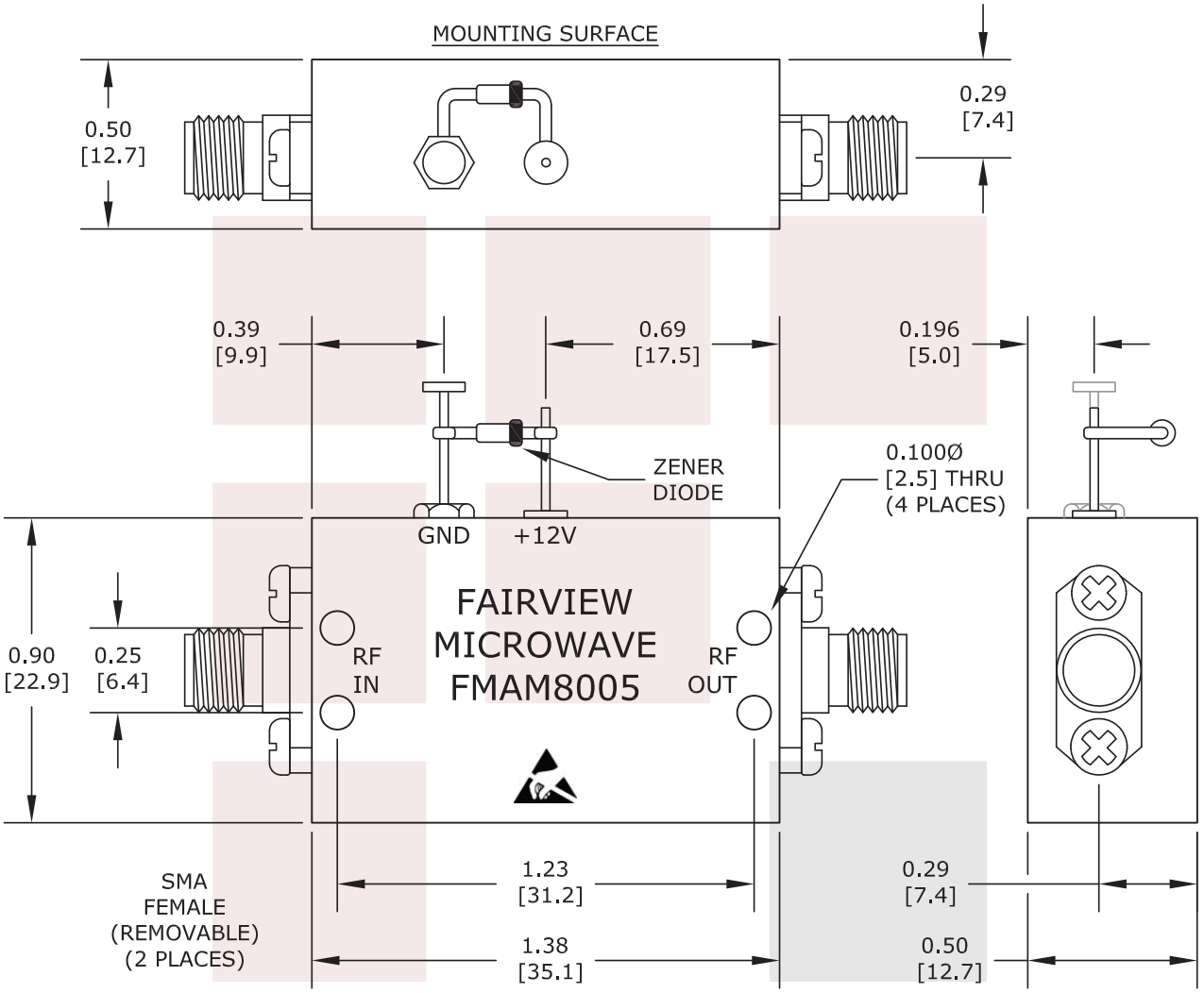




50 dB Gain Block Amplifier Operating From 500 MHz to 2 GHz with 15 dBm P1dB and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: 50 dB Gain Block Amplifier Operating From 500 MHz to 2 GHz with 15 dBm P1dB and SMA FMAM8005

URL: https://www.fairviewmicrowave.com/50-db-gain-block-amplifier-2-ghz-fmam8005-p.aspx



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TITLE 50 dB Gain Block Amplifier Operating From 500 MHz to 2 GHz with 15 dBm P1dB and SMA	DWG NO FMAM8005	CAGE CODE 3FKR5			
	CAD FILE 012017	SHEET	SCALE N/A	SIZE A	2233