

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

The FMAM8004 is wideband general purpose RF coaxial gain block amplifier operating in the 0.5 GHz to 2 GHz frequency range. The amplifier offers 15 dBm min of P1dB, 17 dB typ of Small Signal Gain, IP3 typ of 25 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 -30°C and +70°C.

Electrical Specifications (TA = +25°C, DC Voltage = 12Volts, DC Current = 70mA)

Description	Min	Typ	Max	Unit
Frequency Range	0.5		2	GHz
Small Signal Gain	15	17		dB
Gain Flatness		±0.4	±0.5	dB
Output at 1 dB Compression Point		+15		dBm
Output 3rd Intercept Point		+25		dBm
Noise Figure		1.8		dB
Input VSWR		2:1		
Operating DC Voltage	11	12	15	Volts
Operating DC Current		70	80	mA
Operating Temperature Range	-30		+70	°C

Mechanical Specifications

Size	
Length	1.1 in [27.94 mm]
Width	0.9 in [22.86 mm]
Height	0.5 in [12.7 mm]
Weight	0.0645 lbs [29.26 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:

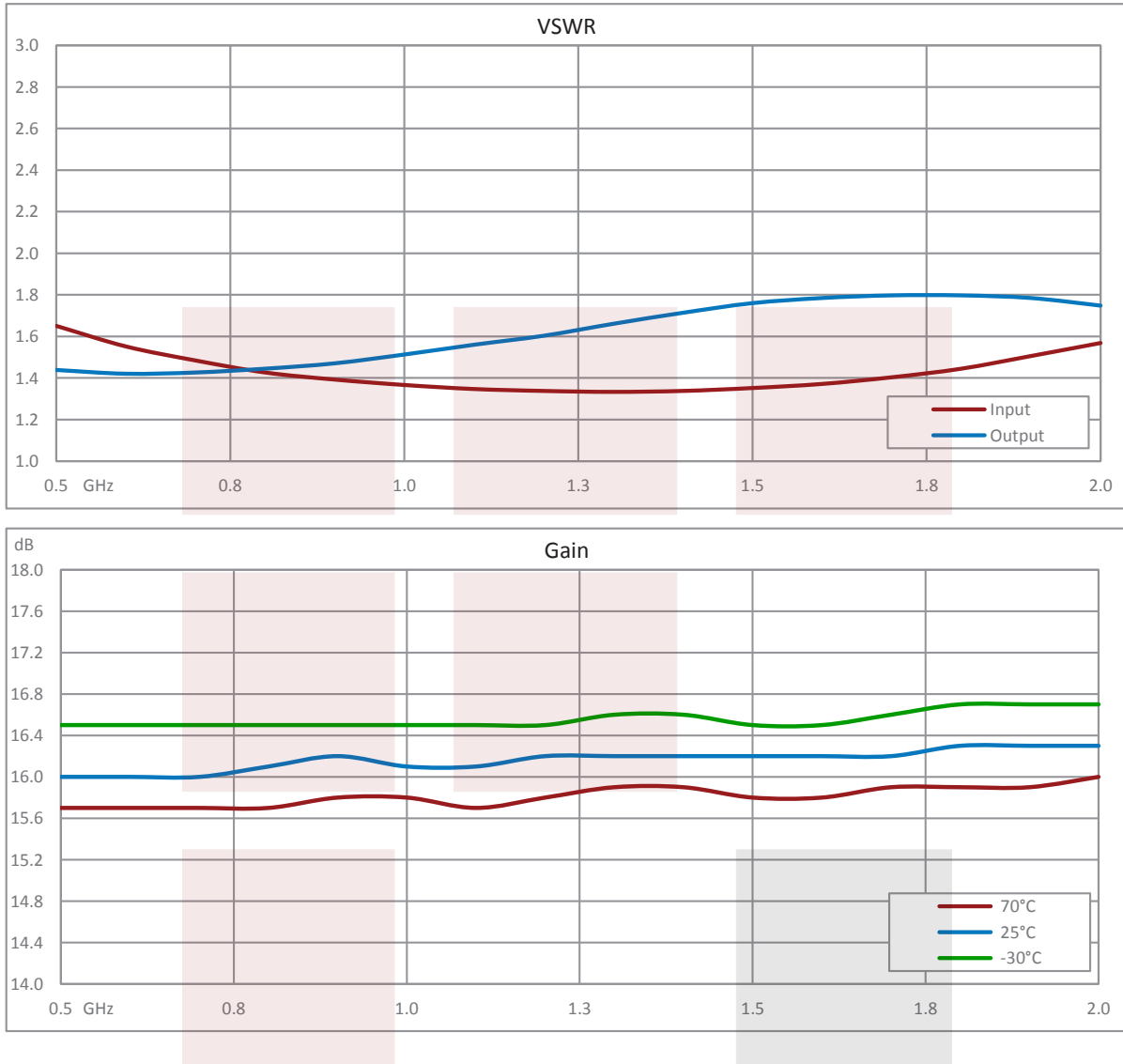
- .5 GHz to 2 GHz Frequency Range
- P1dB 15 dBm min
- Small Signal Gain 17 dB typ
- IP3 25 dBm typ
- 50 Ohm Input and Output Matched
- -30 to +70°C Operating Temperature
- Single DC Positive Supply
- Built-in Voltage Regulator

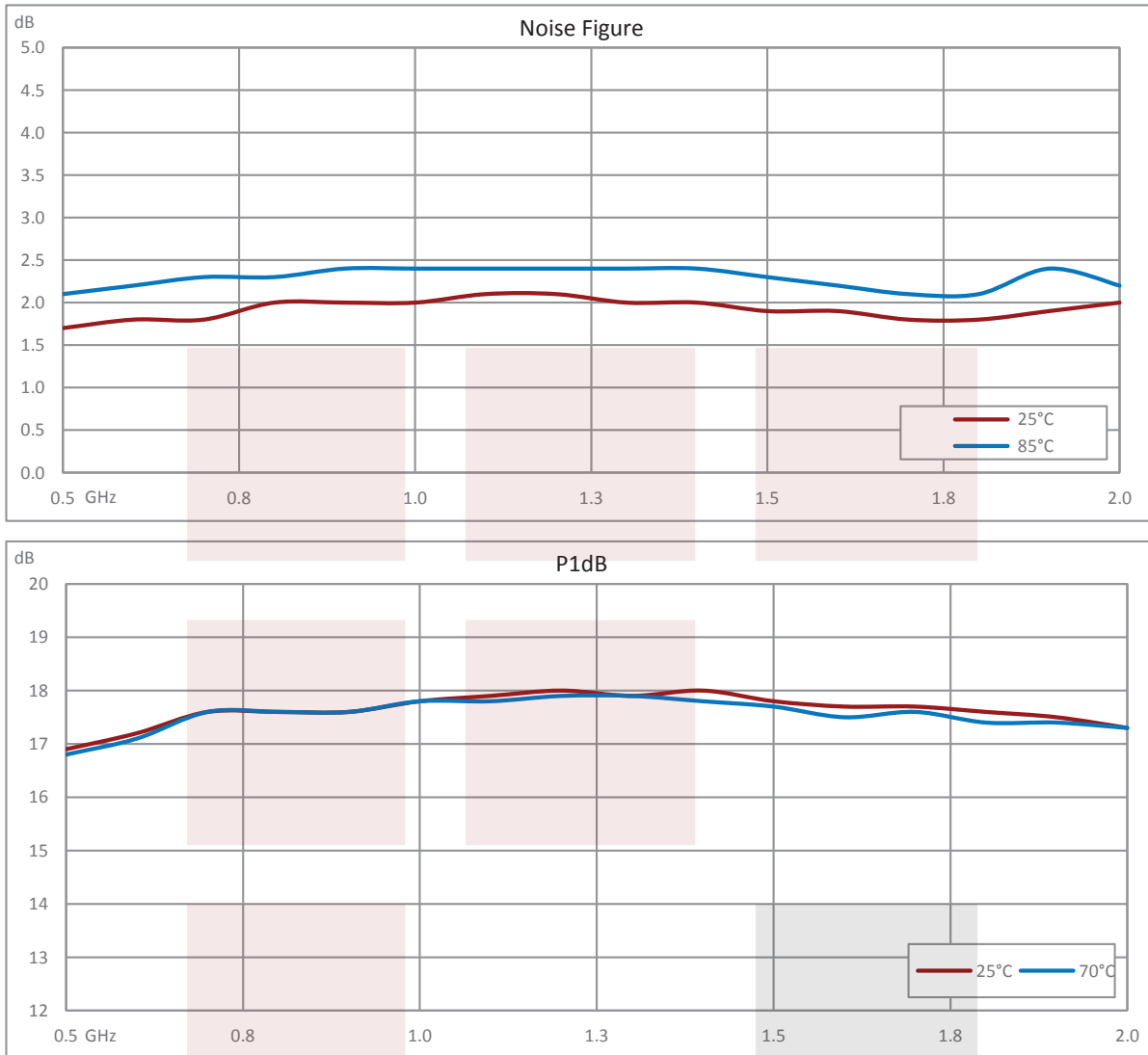
Applications:

- 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



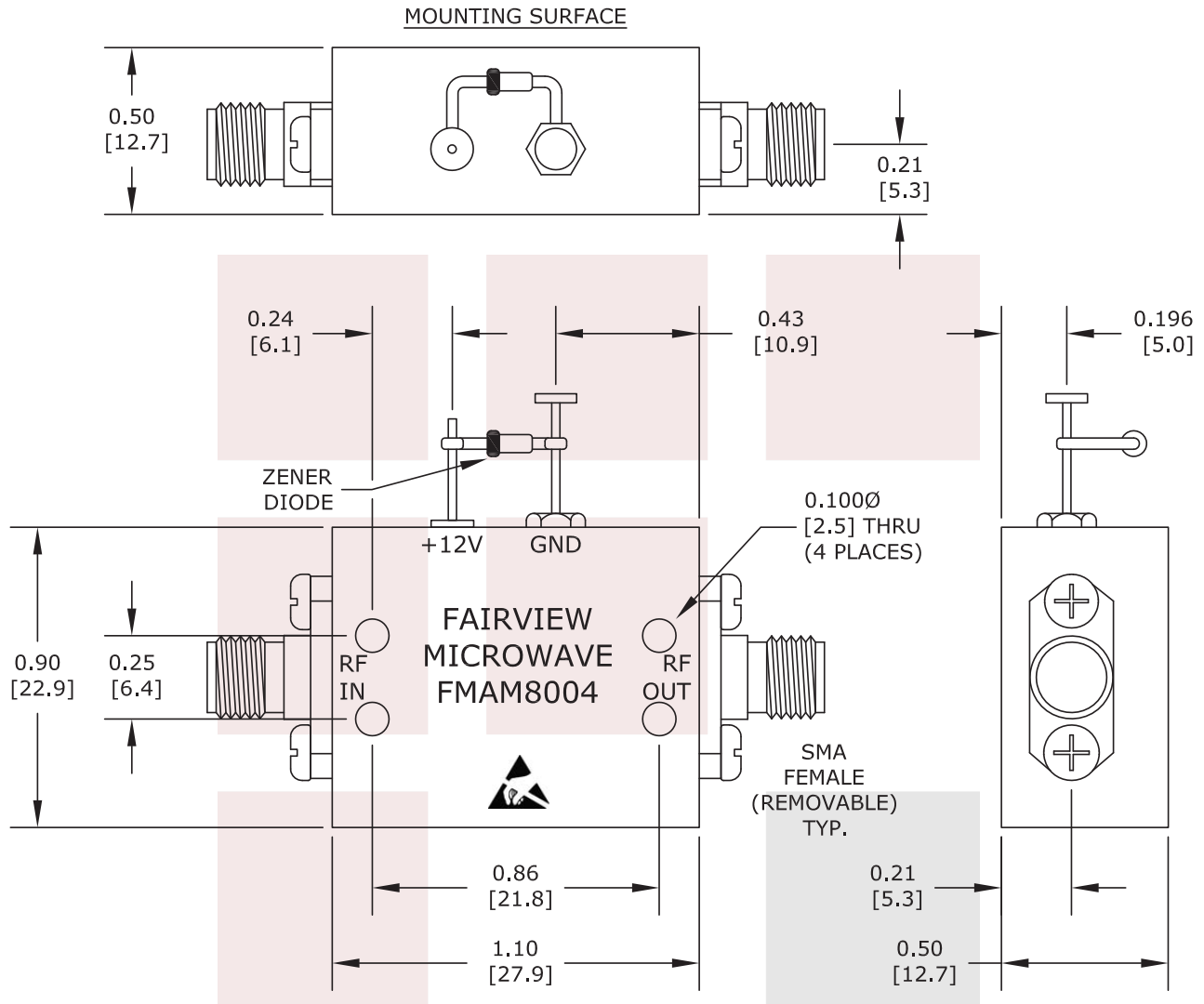


17 dB Gain Block Amplifier Operating From 500 MHz to 2 GHz with 15 dBm P1dB and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [17 dB Gain Block Amplifier Operating From 500 MHz to 2 GHz with 15 dBm P1dB and SMA FMAM8004](https://www.fairviewmicrowave.com/17-db-gain-block-amplifier-2-ghz-fmam8004-p.aspx)

URL: <https://www.fairviewmicrowave.com/17-db-gain-block-amplifier-2-ghz-fmam8004-p.aspx>

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.

FAIRVIEW MICROWAVE INC. ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM		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 17 dB Gain Block Amplifier Operating From 500 MHz to 2 GHz with 15 dBm P1dB and SMA		DWG NO FMAM8004		CAGE CODE 3FKR5	
CAD FILE	032416	SHEET	SCALE	N/A	SIZE A 2233