

High Power Amplifier at 6 Watt P1dB Operating From 800 MHz to 960 MHz with 37 dB Gain, 50 dBm IP3 and SMA

FMAM5041 is a 6 W typical high gain power coaxial amplifier operating in the 860 to 960 MHz frequency range. The amplifier offers 6 Watts typ of P1dB power and a high 37 dB typical small signal gain with the gain flatness of ± 1.25 dB max. The amplifier requires typically a +12V DC power supply. The connectorized SMA module is unconditionally stable and operates over the temperature range of -45°C and +65°C.

Electrical Specifications (TA = +25°C, DC Voltage = 12Volts , DC Current = 1,800mA)

Description	Min	Typ	Max	Unit
Frequency Range	800		960	MHz
Small Signal Gain	34	37	40	dB
Gain Flatness		± 1	± 1.25	dB
Gain Variation at OTR*		± 1.5	2	dB
P1dB	+37.5	+38		dBm
Output 3rd Order Intercept Point	+45	+50		dBm
Reverse Isolation	45	55		dB
Noise Figure		3	4	dB
Spurious			-60	dBc
Input VSWR		1.5:1	1.8:1	
Output VSWR		1.5:1	1.8:1	
Operating DC Voltage	11.5	12	13	Volts
Operating DC Current		1,800	2,100	mA
Operating Temperature Range	-40		+65	°C

*OTR= Base Plate Operating Temperature Range

Absolute Maximum Rating

Parameter	Rating	Units
Source Voltage	+13	Volts
RF input Power	+15	dBm
Maximum Load VSWR	3:1	
Storage Temperature	-55 to +125	°C
Operating Temperature	-45 to +65	°C



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

Mechanical Specifications

Size

Length	2.08 in [52.83 mm]
Width	1.45 in [36.83 mm]
Height	0.5 in [12.7 mm]
Input Connector	SMA Female
Output Connector	SMA Female



Features:

- 800 to 960 MHz Frequency Range
- Psat 6 Watts typ
- Small Signal Gain: 37 dB typ
- Gain Flatness ± 1.25 dB max
- 50 Ohms Input and Output Matched
- Unconditionally Stable
- Regulated Supply

Applications:

- Military Radio
- Communication Systems
- High Gain Driver Power Amplifier
- High Gain Output Power Amplifier

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

Environmental Specifications

Temperature

Operating Range -40 to +65 deg C

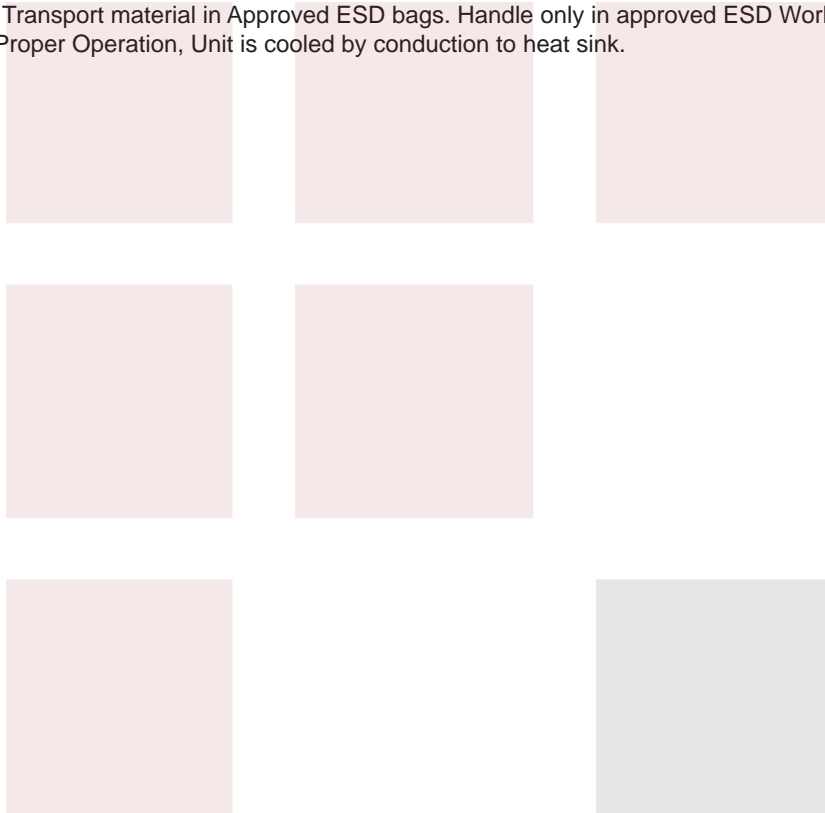
Compliance Certifications (visit www.FairviewMicrowave.com for current document)

RoHS Compliant Yes
REACH Compliant 12/17/2014

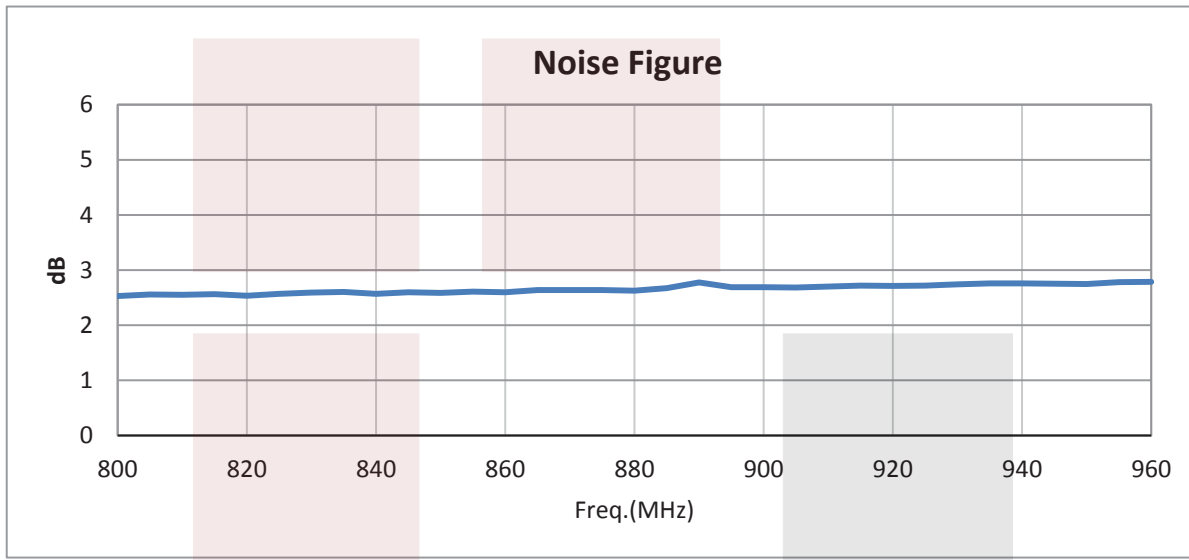
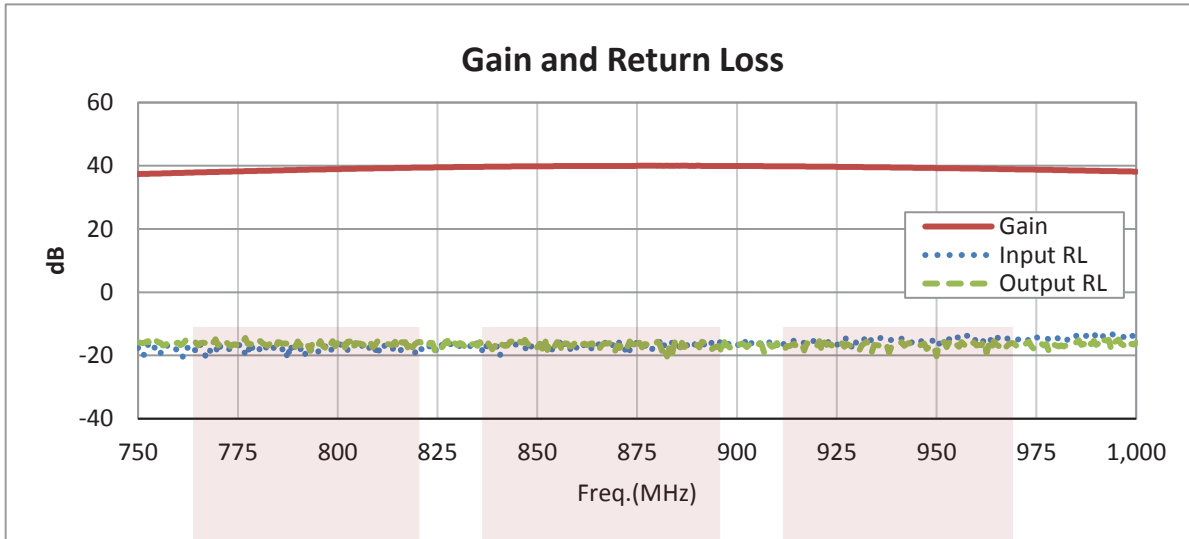
Plotted and Other Data

Notes:

- Values at 25 °C, sea level
- ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in approved ESD Workstation.
- Heat Sink Required for Proper Operation, Unit is cooled by conduction to heat sink.



Typical Performance Data

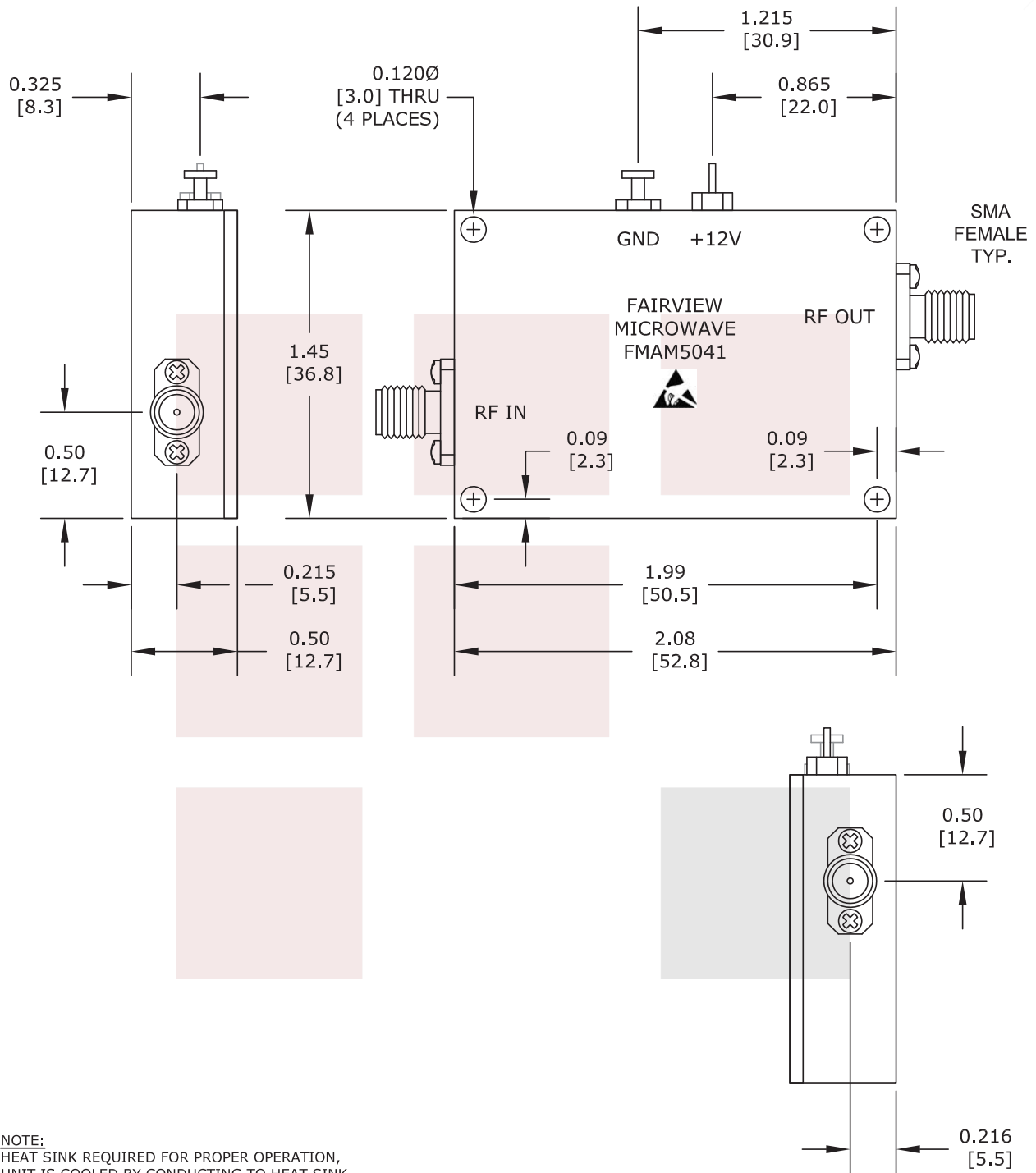


High Power Amplifier at 6 Watt P1dB Operating From 800 MHz to 960 MHz with 37 dB Gain, 50 dBm IP3 and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [High Power Amplifier at 6 Watt P1dB Operating From 800 MHz to 960 MHz with 37 dB Gain, 50 dBm IP3 and SMA FMAM5041](#)

URL: <http://www.fairviewmicrowave.com/high-power-amplifier-6watt-37db-fmam5041-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.

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TITLE High Power Amplifier at 6 Watt P1dB Operating From 800 MHz to 960 MHz with 37 dB Gain, 50 dBm IP3 and SMA		DWG NO FMAM5041		CAGE CODE 3FKR5	
CAD FILE	070115	SHEET	SCALE	N/A	SIZE A 2233