

High Power Amplifier at 6 Watt P1dB Operating From 860 MHz to 960 MHz with 30 dB Gain, 50 dBm IP3 and SMA

FMAM5040 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 30 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 -40°C and +65°C.

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

Description	Min	Typ	Max	Unit
Frequency Range	860		960	MHz
Small Signal Gain	28	30	33	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: 30 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

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Environmental Specifications

Temperature

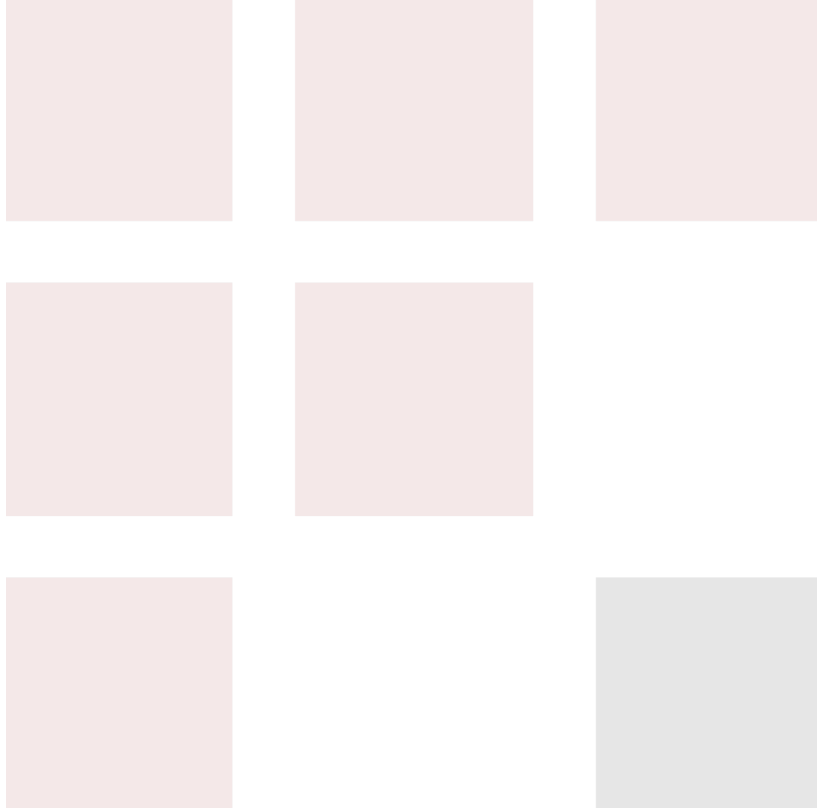
Operating Range -40 to +65 deg C

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

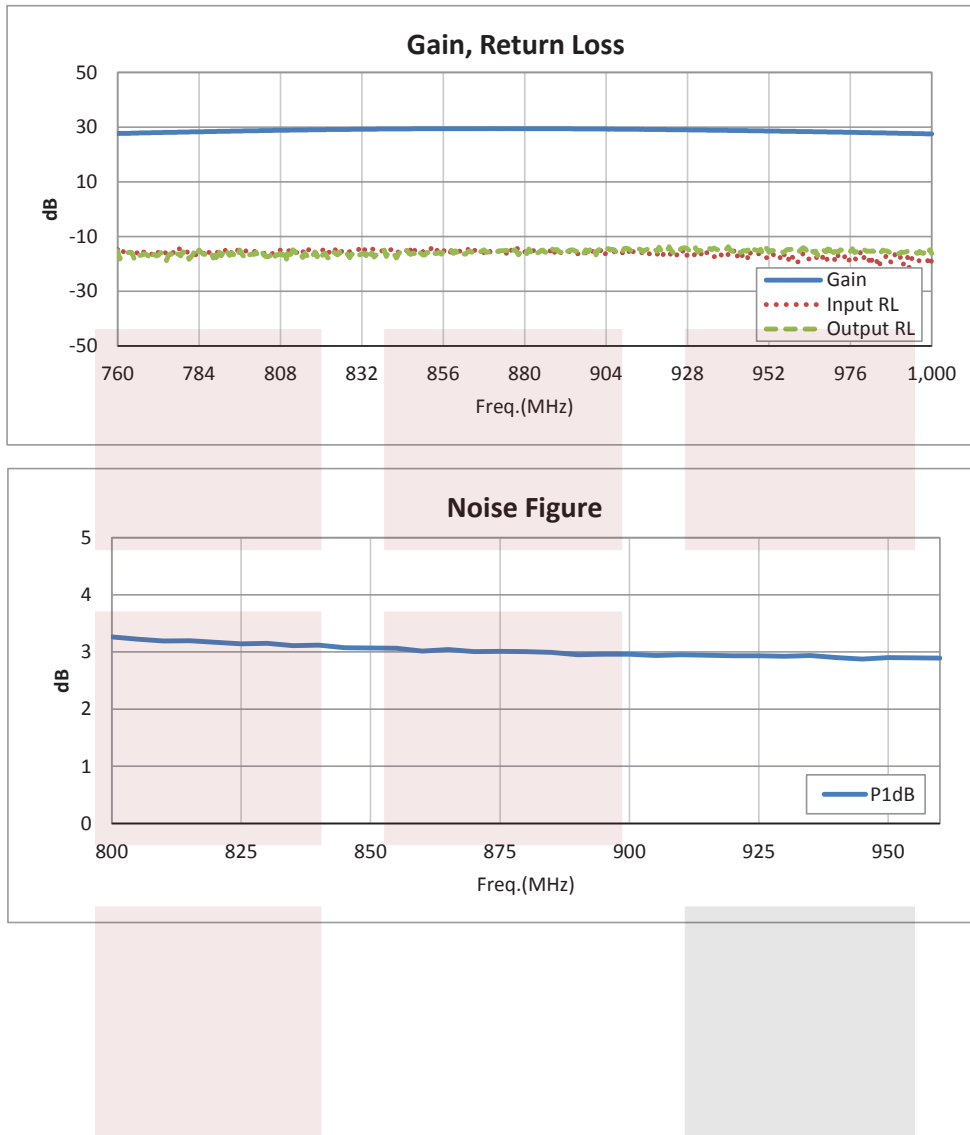
Plotted and Other Data

Notes:

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



Typical Performance Data

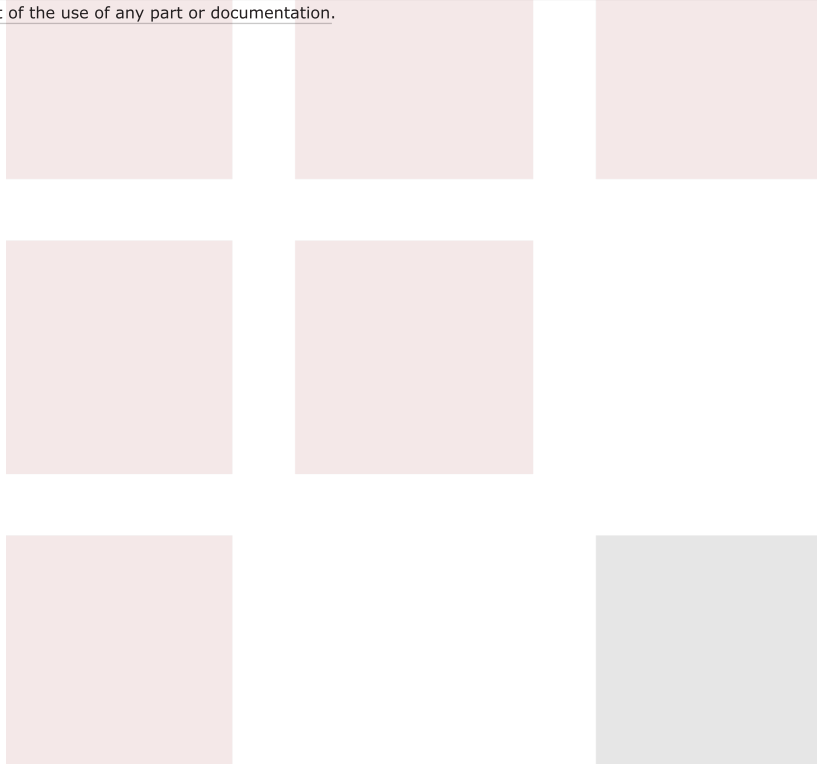


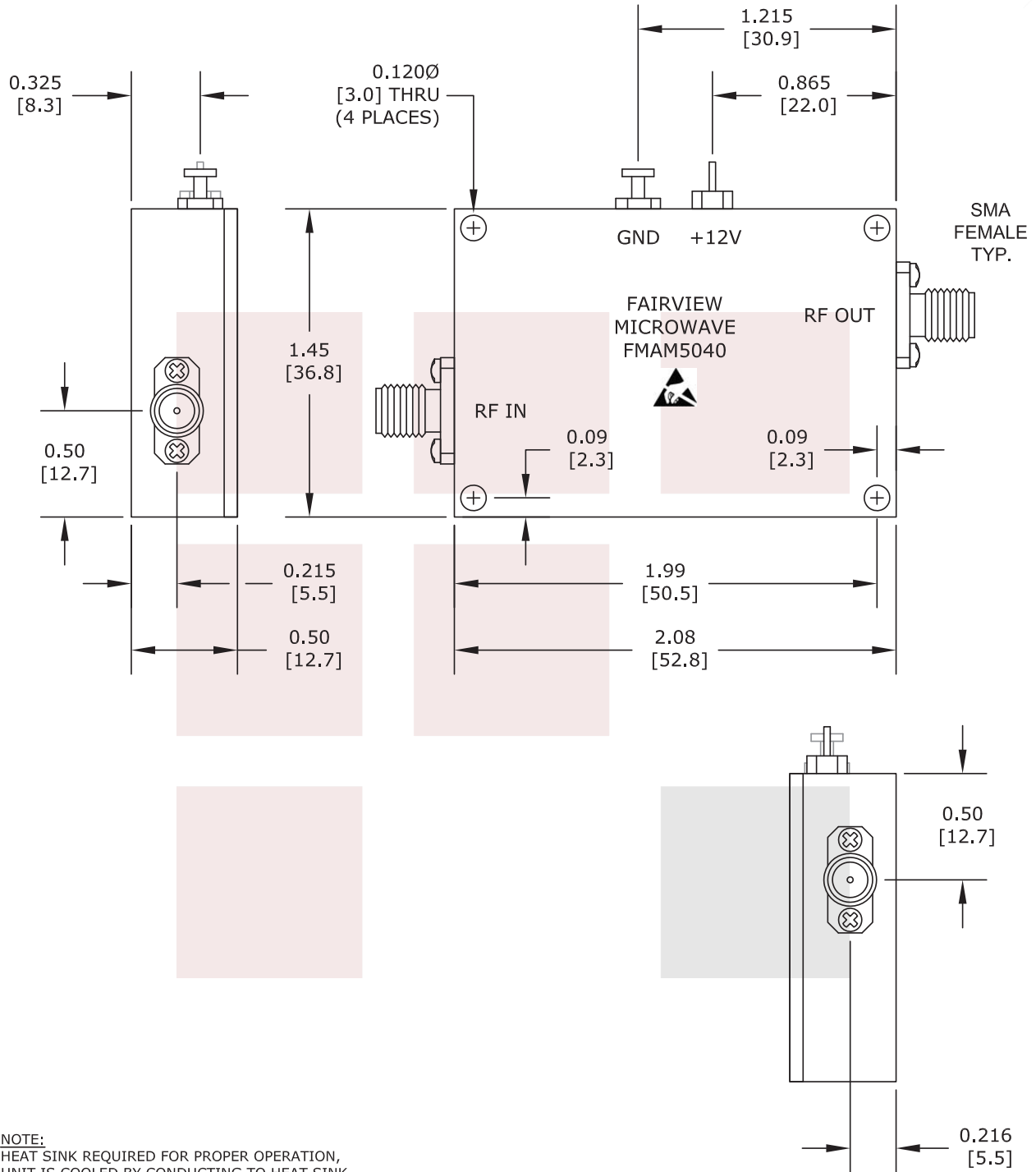
High Power Amplifier at 6 Watt P1dB Operating From 860 MHz to 960 MHz with 30 dB Gain, 50 dBm IP3 and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview 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 860 MHz to 960 MHz with 30 dB Gain, 50 dBm IP3 and SMA FMAM5040](#)

URL: <http://www.fairviewmicrowave.com/high-power-amplifier-6watt-30db-fmam5040-p.aspx>

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TITLE High Power Amplifier at 6 Watt P1dB Operating From 860 MHz to 960 MHz with 30 dB Gain, 50 dBm IP3 and SMA		DWG NO FMAM5040		CAGE CODE 3FKR5	
CAD FILE	070115	SHEET	SCALE	N/A	SIZE A 2233