

High Power Amplifier at 4 Watt Psat Operating From 1 MHz to 1,000 MHz with 36 dB Gain, 39 dBm IP3 and SMA

FMAM5030 is a high gain Class A/AB coaxial Linear Power Amplifier operating in the 1 to 1000 MHz frequency range. The amplifier offers a Wide Dynamic Range with 4 Watts typical (2 Watt minimum) saturated power, 36 dB typical small signal gain, ± 1.5 dB gain flatness maximum, and a high Output IP3 of +39 dBm typical. The amplifier requires typically a +28V DC power supply, is unconditionally stable, and operates over the temperature range of 0°C and +50°C. RF Input/Output Connectors are SMA Female.



Electrical Specifications (TA = +25°C, DC Voltage = 28Volts , DC Current = 1,200mA)

Description	Min	Typ	Max	Unit
Frequency Range	1		1,000	MHz
Small Signal Gain	36			dB
Gain Flatness			± 1.5	dB
Input Power			+3	dBm
Psat		+36		dBm
P1dB	+33			dBm
Output 3rd Order Intercept Point		+39		dBm
Harmonics @2 Watts		-20		dBc
Spurious @2 Watts		-60		dBc
Input VSWR			2:1	
TTL Control	"1": On, "0": Off, Enable: 5V, Disable: 0V			
Operating DC Voltage		28		Volts
Operating DC Current			1,200	mA
Operating Temperature Range	0		+50	°C

Features:

- 1 MHz to 1000 MHz Frequency Range
- Psat 4 Watts typ
- Small Signal Gain: 36 dB min
- Gain Flatness ± 1.5 dB max
- Class A/AB
- IP3 39 dBm typ
- 50 Ohms Input and Output Matched
- Unconditionally Stable
- Regulated Supply
- RF Input Signal Format CW/AM/FM/PM/Pulse
- SMA Female RF Connectors

Applications:

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

Mechanical Specifications

Size	
Length	6 in [152.4 mm]
Width	3 in [76.2 mm]
Height	1.1 in [27.94 mm]
Weight	1 lbs [453.59 g]
Input Connector	SMA Female
Output Connector	SMA Female
Cooling	ADEQUATE HEATSINK REQUIRED

Environmental Specifications

Temperature	
Operating Range	0 to +50 deg C
Humidity	95% Non-Condensing
Shock	Normal Truck Transport
Vibration	Normal Truck Transport
Altitude	10000 feet Above Sea Level

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

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

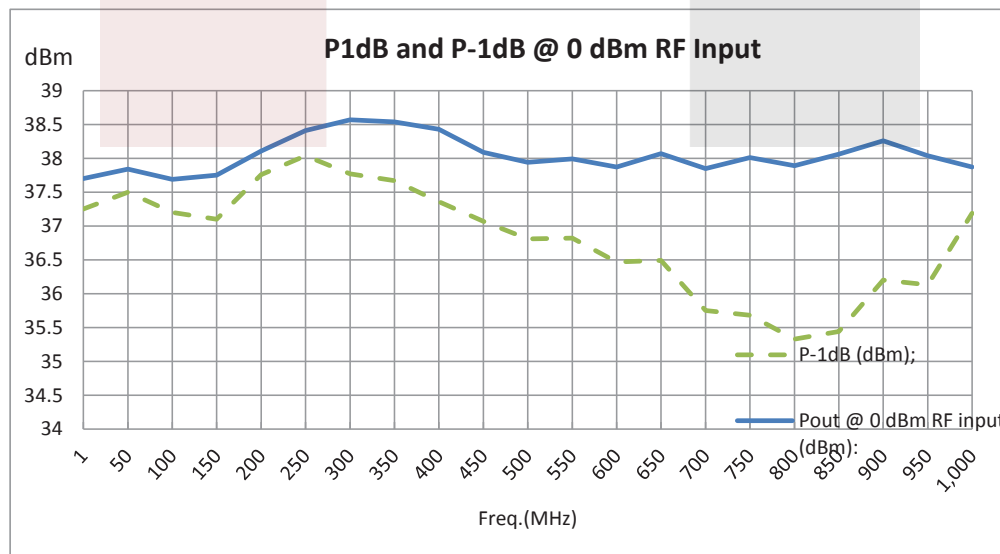
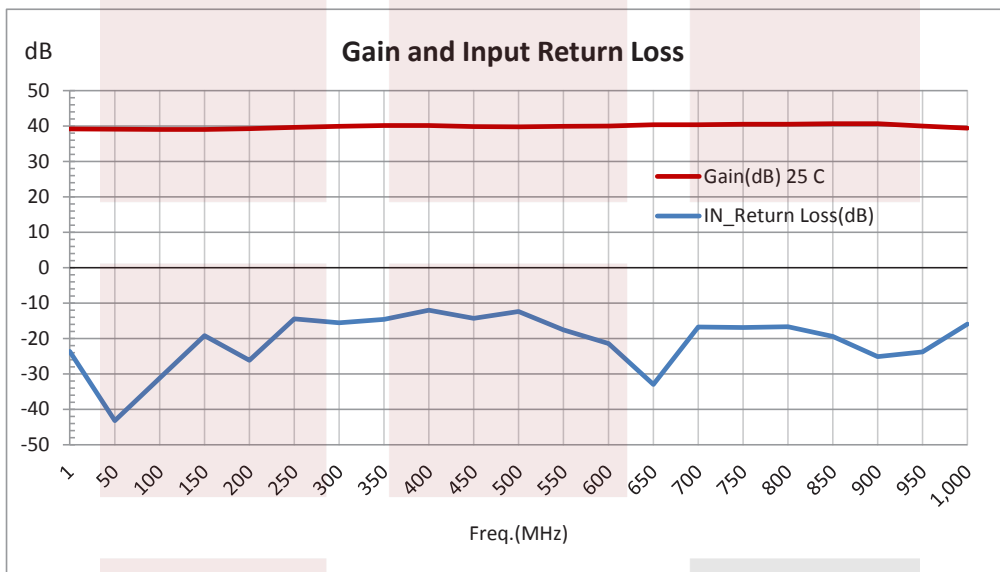
Plotted and Other Data

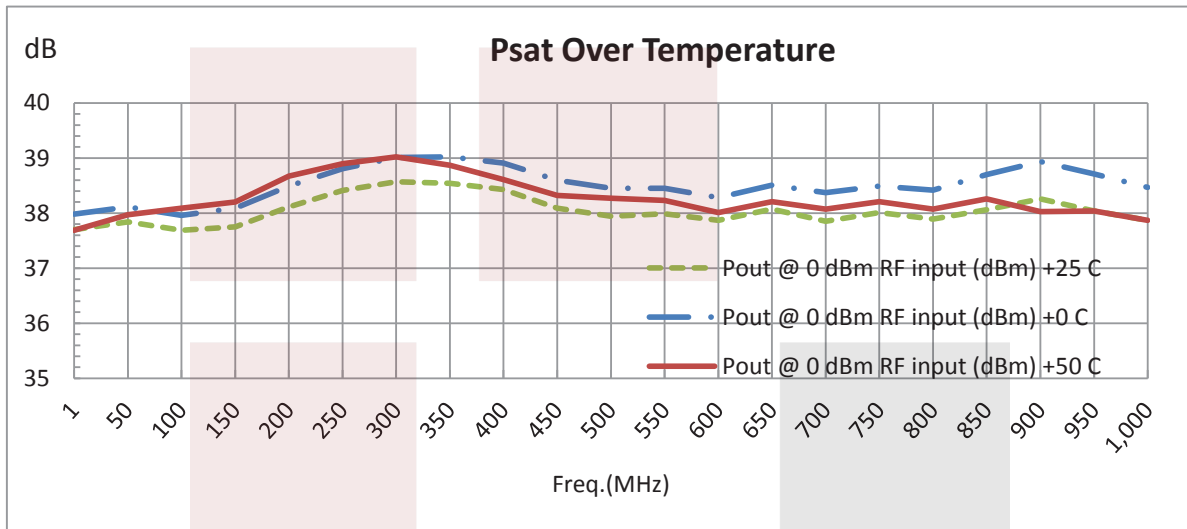
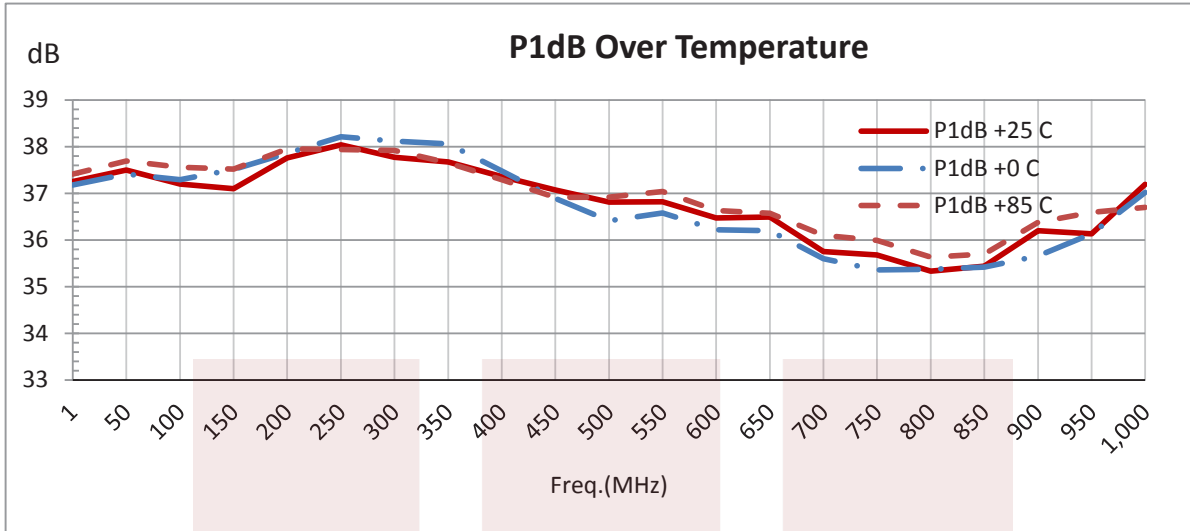
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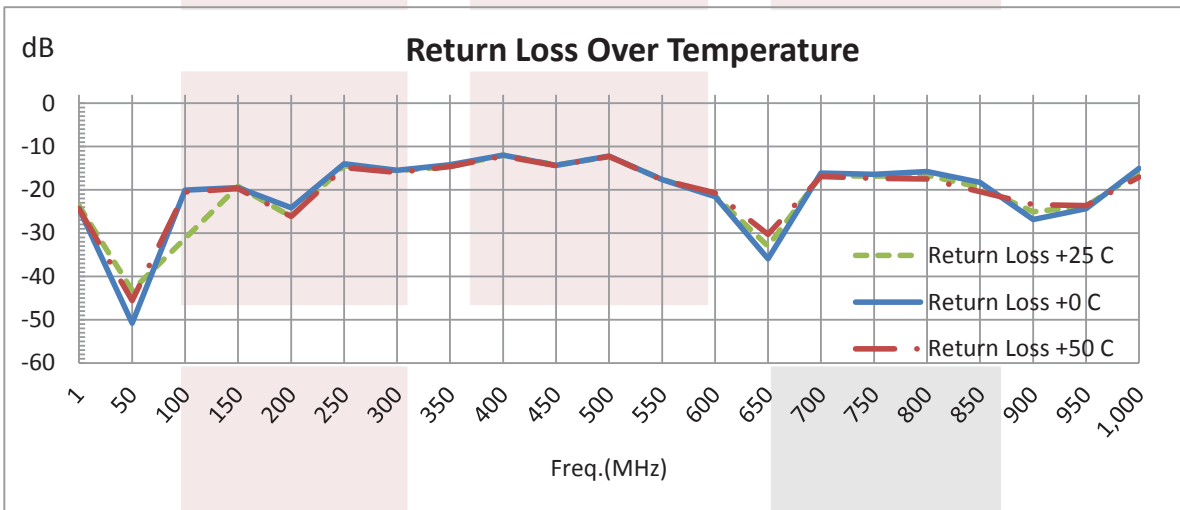
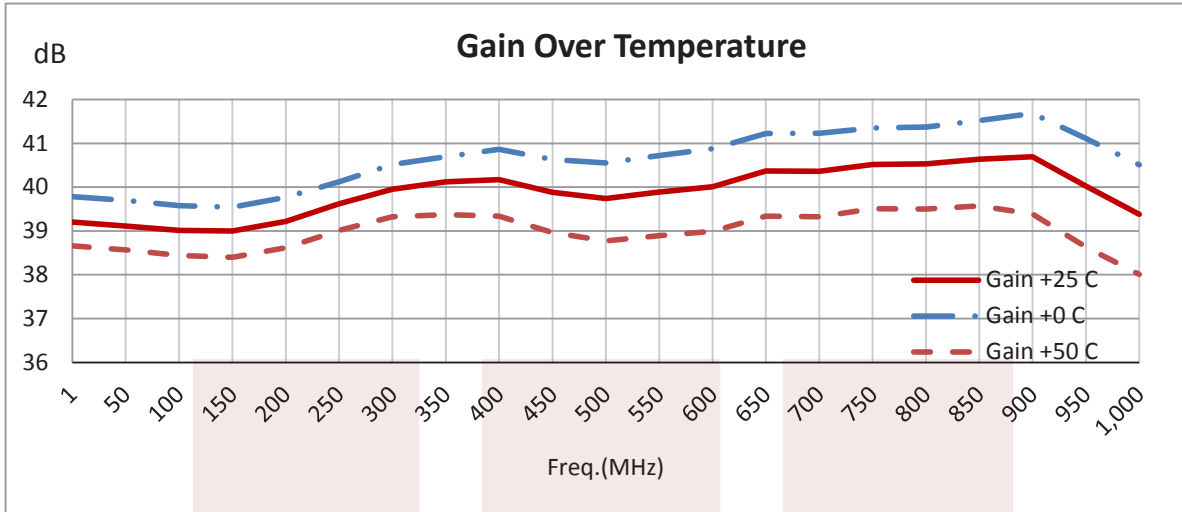
- Values at 25 °C, sea level
- ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in approved ESD Workstation.
- Heat Sink Required for Proper Operation, Unit is cooled by conduction to heat sink.



Typical Performance Data





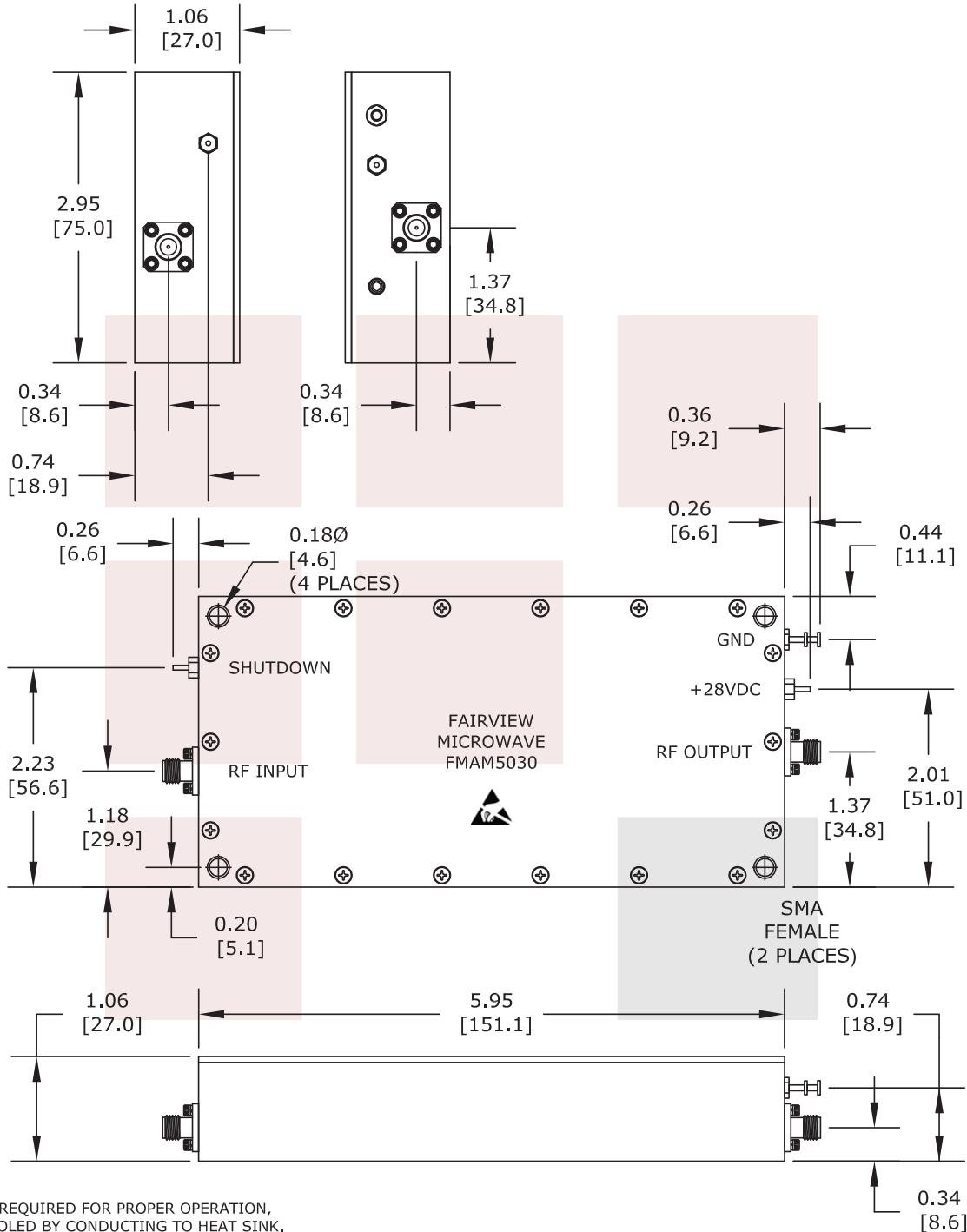


High Power Amplifier at 4 Watt Psat Operating From 1 MHz to 1,000 MHz with 36 dB Gain, 39 dBm IP3 and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [High Power Amplifier at 4 Watt Psat Operating From 1 MHz to 1,000 MHz with 36 dB Gain, 39 dBm IP3 and SMA FMAM5030](http://www.fairviewmicrowave.com/high-power-amplifier-4watt-36db-fmam5030-p.aspx)

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TITLE High Power Amplifier at 4 Watt Psat Operating From 1 MHz to 1,000 MHz with 36 dB Gain, 39 dBm IP3 and SMA		DWG NO FMAM5030		CAGE CODE 3FKR5	
CAD FILE 032715 SHEET		SCALE N/A		SIZE A 2233	