



# 46 dB Gain High Power High Gain Amplifier at 25 Watt Psat Operating From 20 MHz to 1,000 MHz with 48 dBm IP3 and SMA

FMAM5031 is a 25W high gain coaxial power amplifier operating in the 20 to 1000 MHz frequency range. The amplifier offers 25 Watts typical saturated power and 46 dB typical small signal gain with ±1.5 dB maximum gain flatness. The amplifier requires typically a +28V DC power supply. The connectorized SMA module is unconditionally stable and operates over the temperature range of 0°C and +50°C.

# **Electrical Specifications** (TA = +25°C, DC Voltage = 28Volts, DC Current

5,200mA)					
Description	Min	Тур	Max	Unit	
Frequency Range	20		1,000	MHz	
Small Signal Gain	46			dB	
Gain Flatness			±1.5	dB	
Input Power			+0	dBm	
Psat		+44		dBm	
P1dB	+40			dBm	
Output 3rd Order Intercept	Point	+48		dBm	
Harmonics		-20		dBc	
Spurious		-60		dBc	
Input VSWR			2:1		
Operating DC Voltage		28		Volts	
Operating DC Current			5,200	mA	
Operating Temperature Rai	nge 0		+50	°C	



## Features:

- 20 MHz to 1000 MHz Frequency Range
- Psat 25 Watts typ
- · Small Signal Gain: 46 dB min
- Gain Flatness ±1.5 dB max
- IP3 48 dBm typ
- 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

## **Mechanical Specifications**

Size Length Width

6 in [152.4 mm] 3 in [76.2 mm] 1.1 in [27.94 mm] Height Weight 1 lbs [453.59 g] Input Connector SMA Female **Output Connector** SMA Female

## **Environmental Specifications**

## **Temperature**

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

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

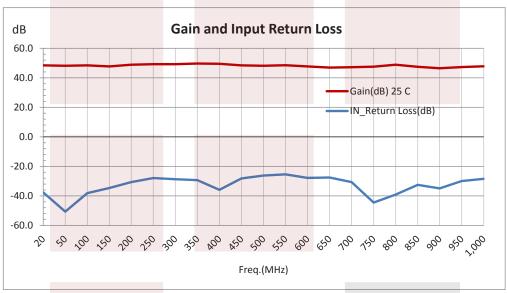
### **Plotted and Other Data**

#### 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.



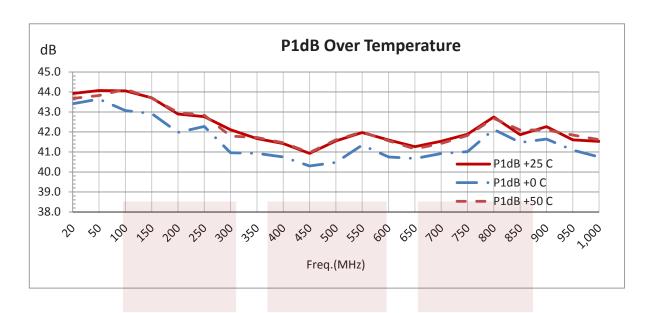
### **Typical Performance Data**

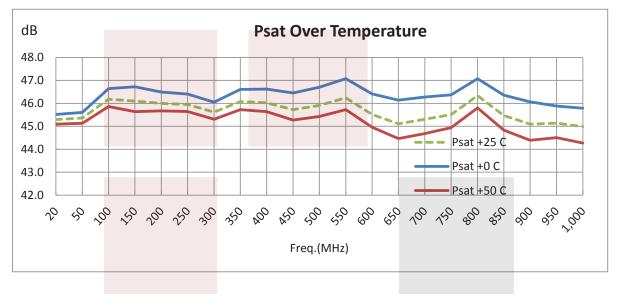




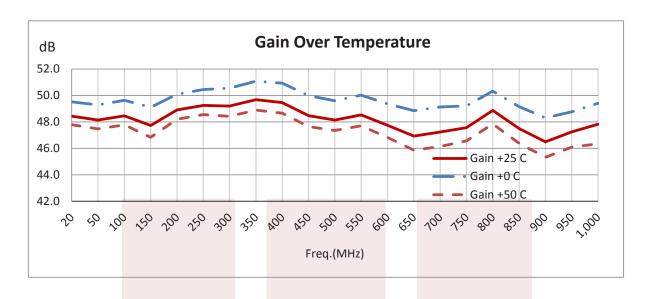


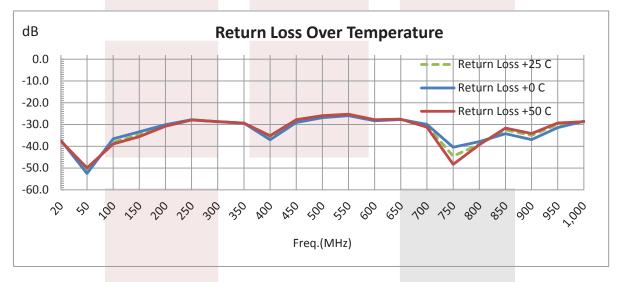












46 dB Gain High Power High Gain Amplifier at 25 Watt Psat Operating From 20 MHz to 1,000 MHz with 48 dBm IP3 and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

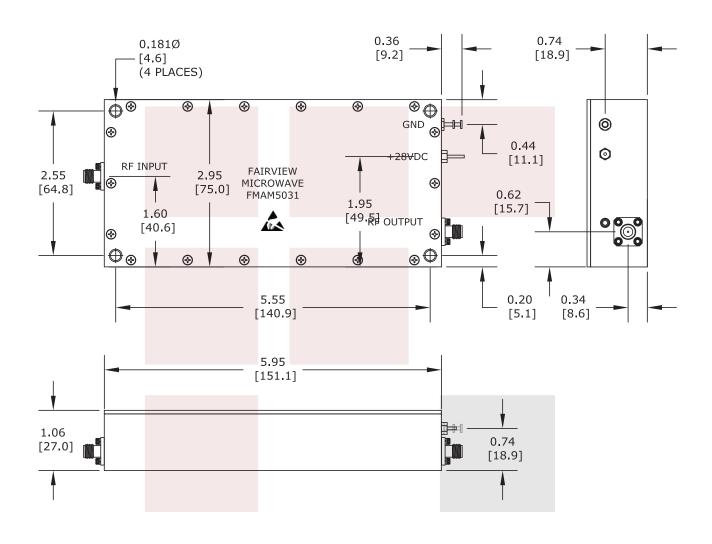
For additional information on this product, please click the following link: 46 dB Gain High Power High Gain Amplifier at 25 Watt Psat Operating From 20 MHz to 1,000 MHz with 48 dBm IP3 and SMA FMAM5031

URL: http://www.fairviewmicrowave.com/46db-high-power-high-gain-amplifier-25watt-fmam5031-p.aspx

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#### NOTE: HEAT SINK REQUIRED FOR PROPER OPERATION, UNIT IS COOLED BY CONDUCTING TO HEAT SINK.

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46 dB Gain High Power High Gain Amplifier at 25 Watt Psat Operating From 20 MHz to 1,000 MHz with 48 dBm IP3 and SMA	DWG NO FMAM5031				CAGE CODE 3FKR5			
	CAD FILE 032715	SHEET	SCALE	N/A	SIZE A	2233		