



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

FMAM5030F 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 minimum small signal gain,  $\pm 1.5$  dB gain flatness maximum, and a high Output IP3 of  $\pm 3.5$  dBm typical. The amplifier requires typically a  $\pm 2.5$  DC power supply, is unconditionally stable, and operates over the temperature range of 0°C and  $\pm 5.5$ °C. RF Input/Output Connectors are SMA Female. The unit includes a Heatsink and Fan.

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

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Description	Min		Тур	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				1,700	mA
Operating Temperature Rai	nge 0			+50	°C

# **Mechanical Specifications**

Size

Length 8.7 in [220.98 mm]
Width 5.2 in [132.08 mm]
Height 3.5 in [88.9 mm]

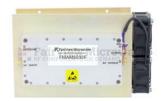
Weight 4 lbs [1.81 Kg]
Input Connector SMA Female
Output Connector SMA Female
Cooling ADEQUATE HEATSINK INCLUDED

**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



### 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
- · Heatsink and Fan

## Applications:

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

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

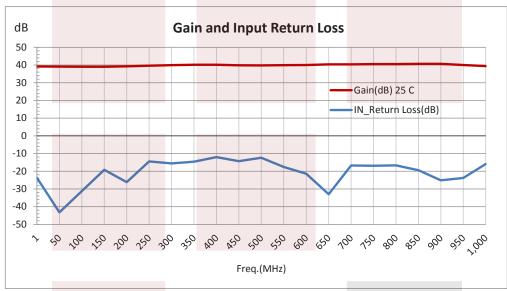
#### **Plotted and Other Data**

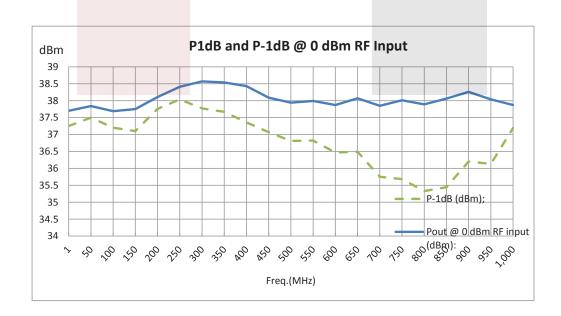
#### Notes:

- · 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.



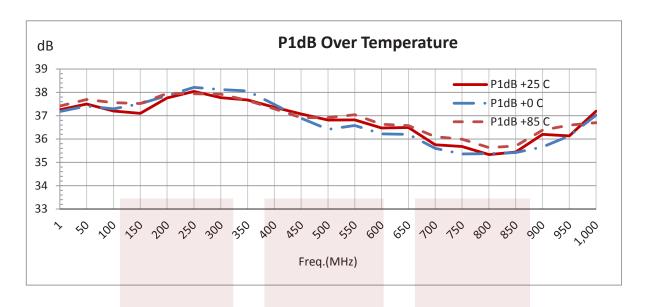
#### **Typical Performance Data**

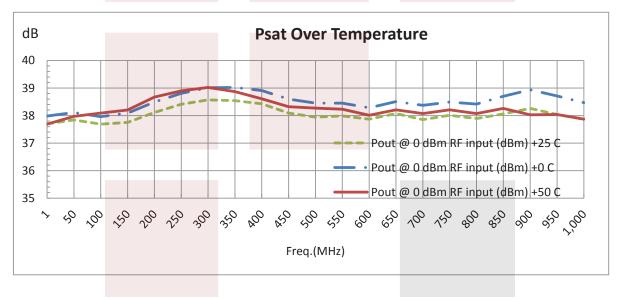




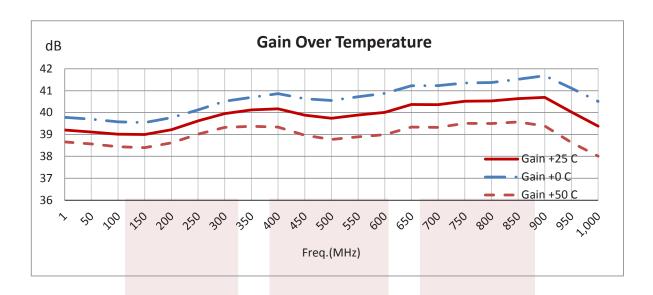


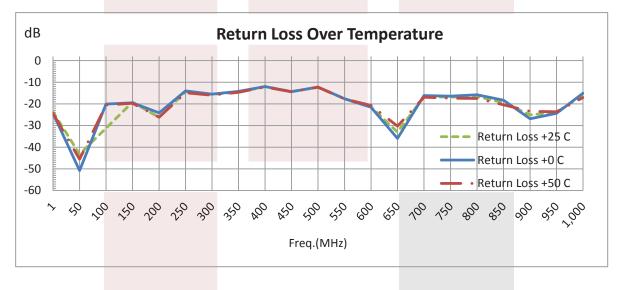












High Power Amplifier at 4 Watt Psat Operating From 1 MHz to 1,000 MHz with 36 dB Gain, 39 dBm IP3 and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview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

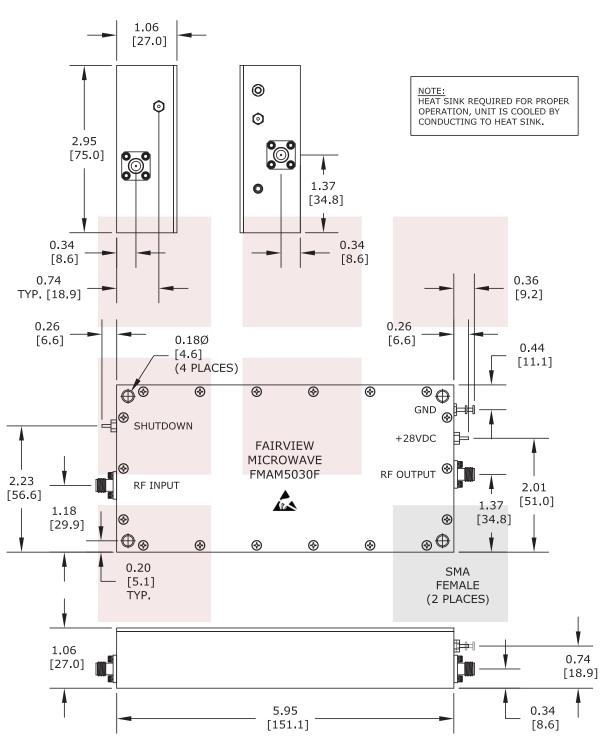
For additional information on this product, please click the following link: High Power Amplifier at 4 Watt Psat Operating From 1 MHz to 1,000 MHz with 36 dB Gain, 39 dBm IP3 and SMA FMAM5030F

URL: http://www.fairviewmicrowave.com/high-power-amplifier-4watt-36db-fmam5030f-p.aspx

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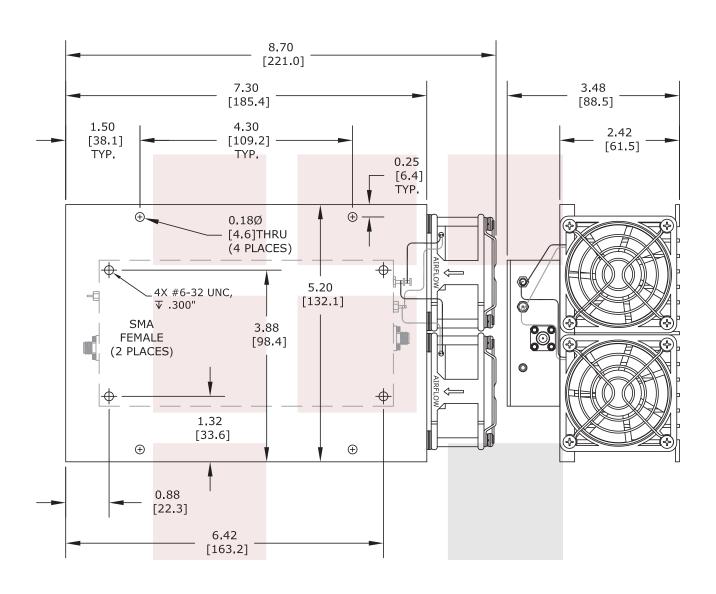




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High Power Amplifier at 4 Watt Psat Operating From 1 MHz to 1,000 MHz with 36 dB Gain, 39 dBm IP3 and SMA	DWG NO FMAM5030F			CAGE CODE 3FKR5			
	P3 and	CAD FILE	052115	SHEET	SCAL	E N/A	SIZE A







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

	FAIRVIEW MICROWAVE INC. ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM	2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY I				IY TIME.		
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