

**40 dB Gain High Power High Gain Amplifier at
 10 Watt Psat Operating From 1 GHz to 2.5 GHz with
 49 dBm IP3 and SMA**

FMAM5036F is a 10 W high gain coaxial power amplifier operating in the 1.0 to 2.5 GHz frequency range. The amplifier offers 10 Watts typical saturated power and 40 dB min small signal gain with ±1.5 dB maximum gain flatness. The amplifier requires typically a +13V DC power supply. The connectorized SMA module is unconditionally stable, operates over the temperature range of 0°C and +50°C, and has a heatsink and fan for proper operation.

Electrical Specifications (TA = +25°C, DC Voltage = 13Volts , DC Current = 5,500mA)

Description	Min	Typ	Max	Unit
Frequency Range	1		2.5	GHz
Small Signal Gain	40			dB
Gain Flatness			±1.5	dB
Input Power			+10	dBm
Psat		+40		dBm
P1dB	+39			dBm
Output 3rd Order Intercept Point		+49		dBm
Harmonics		-20		dBc
Spurious		-60		dBc
Input VSWR			2:1	
TTL Control	"1" = On; "0" = Off			
TTL Control Enable		5		Volts
TTL Control Disable		0		Volts
Operating DC Voltage		13		Volts
Operating DC Current			5,500	mA
Operating Temperature Range	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	5 lbs [2.27 Kg]
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



Features:

- 1.0 GHz to 2.5 GHz Frequency Range
- Psat 10 Watts typ
- Small Signal Gain: 40 dB min
- Gain Flatness ±1.5 dB max
- IP3 49 dBm typ
- 50 Ohms Input and Output Matched
- Unconditionally Stable
- Regulated Supply
- Heatsink and Fan

Applications:

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

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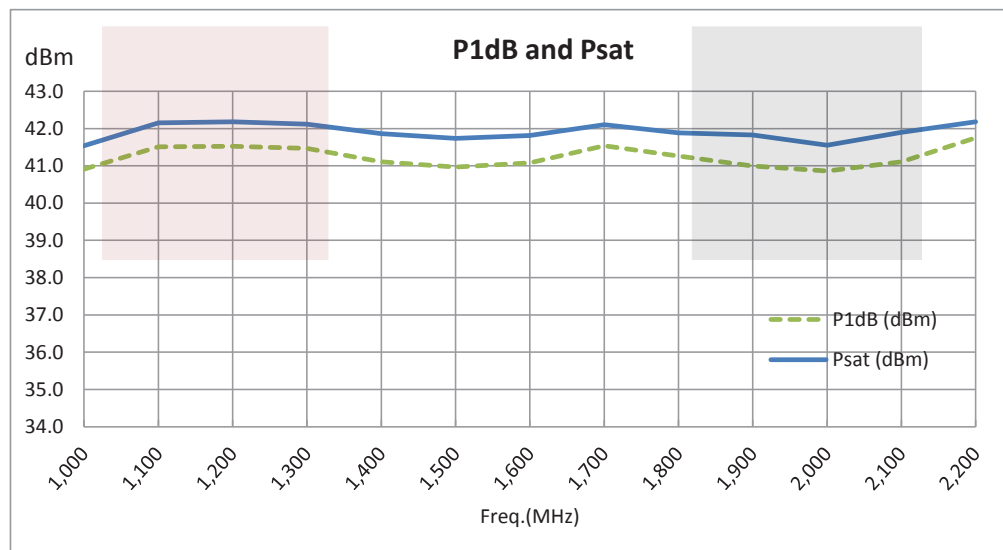
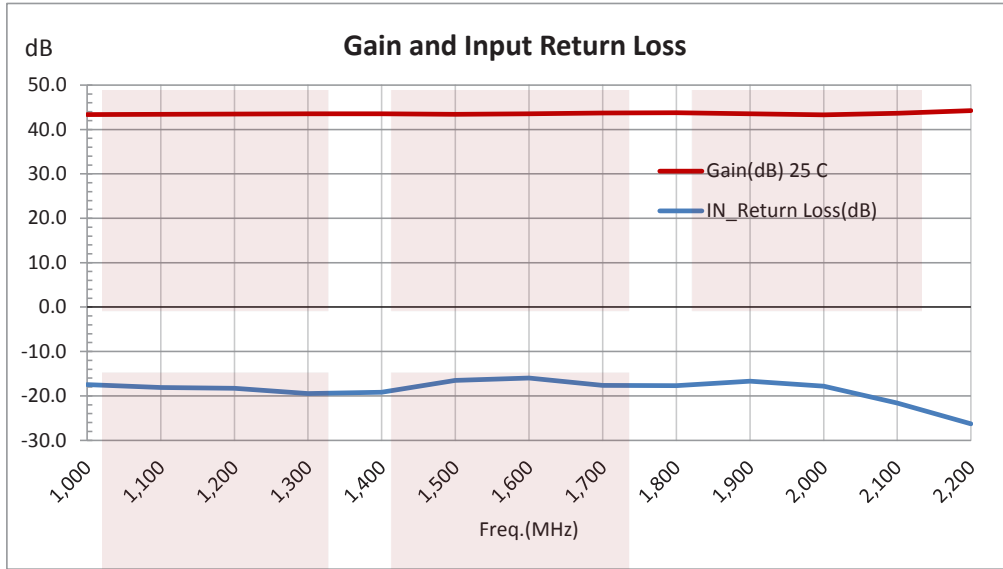
Compliance Certifications (visit www.FairviewMicrowave.com for current document)

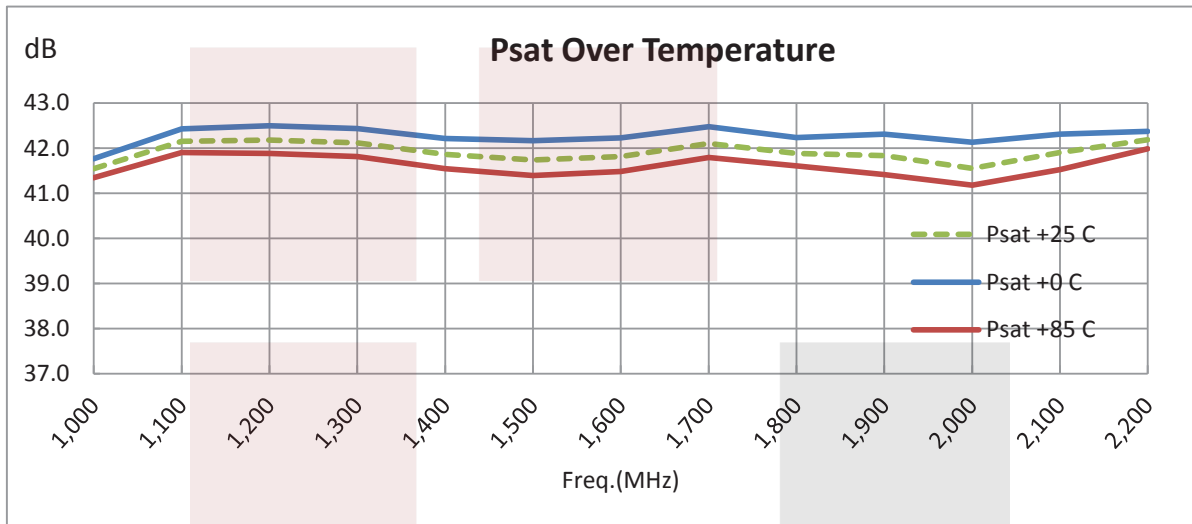
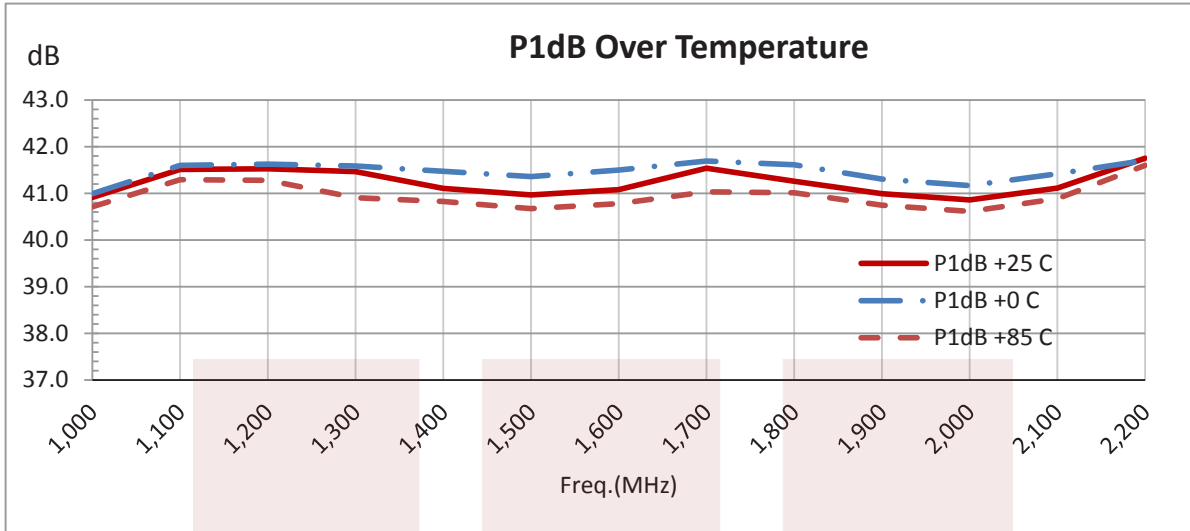
Plotted and Other Data

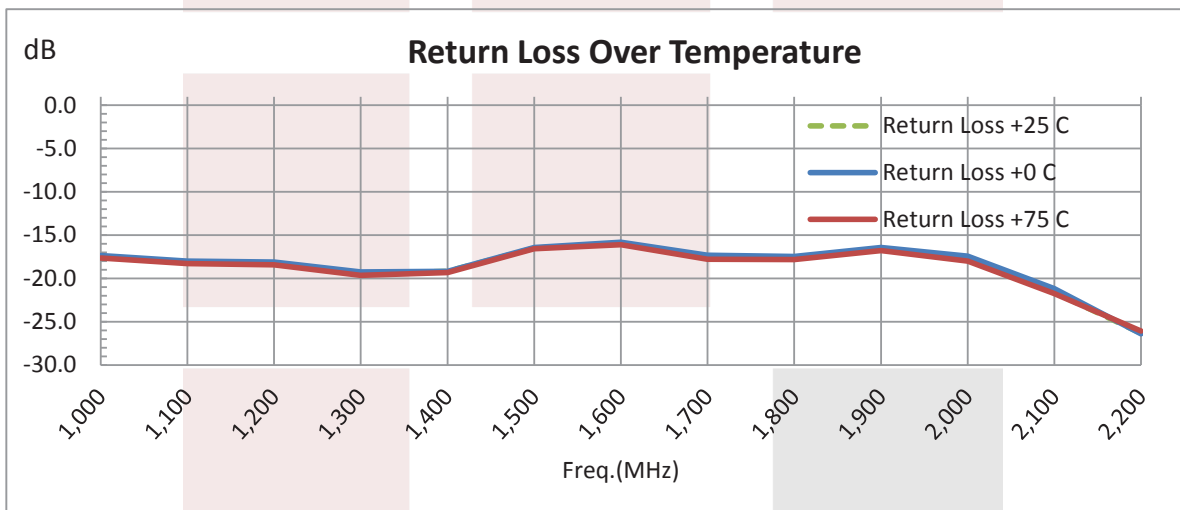
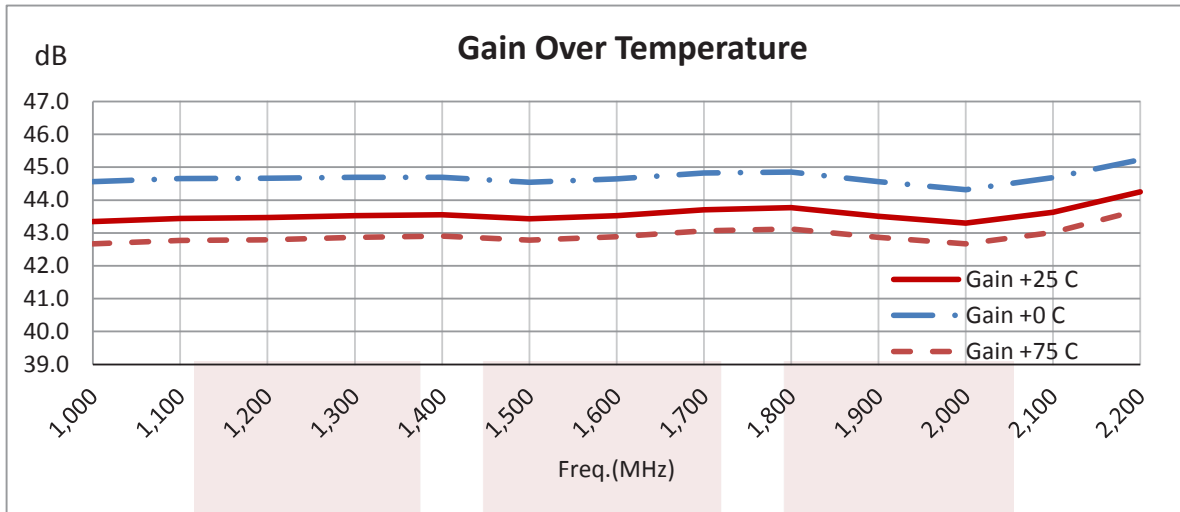
Notes:

- 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





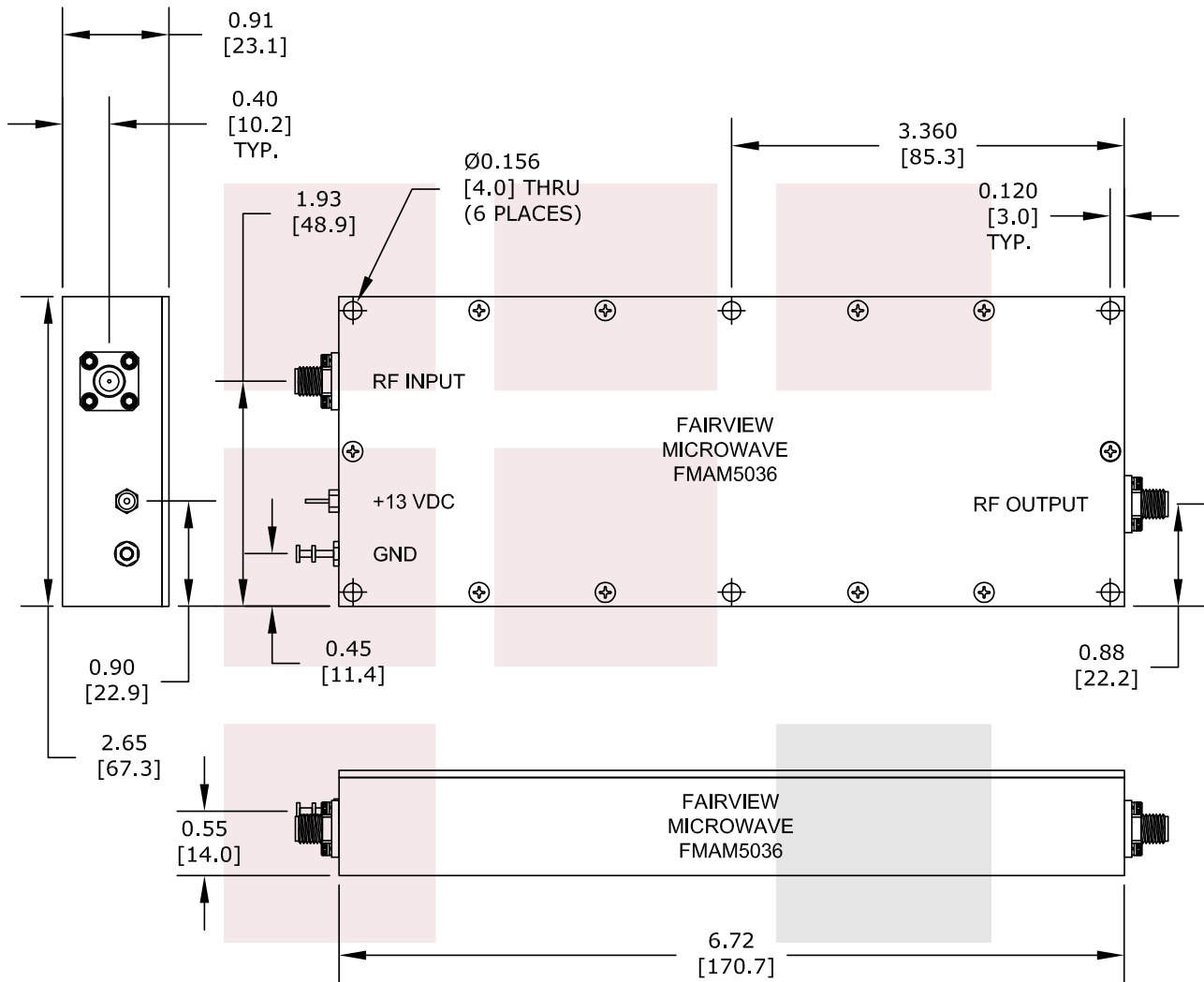


40 dB Gain High Power High Gain Amplifier at 10 Watt Psat Operating From 1 GHz to 2.5 GHz with 49 dBm IP3 and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

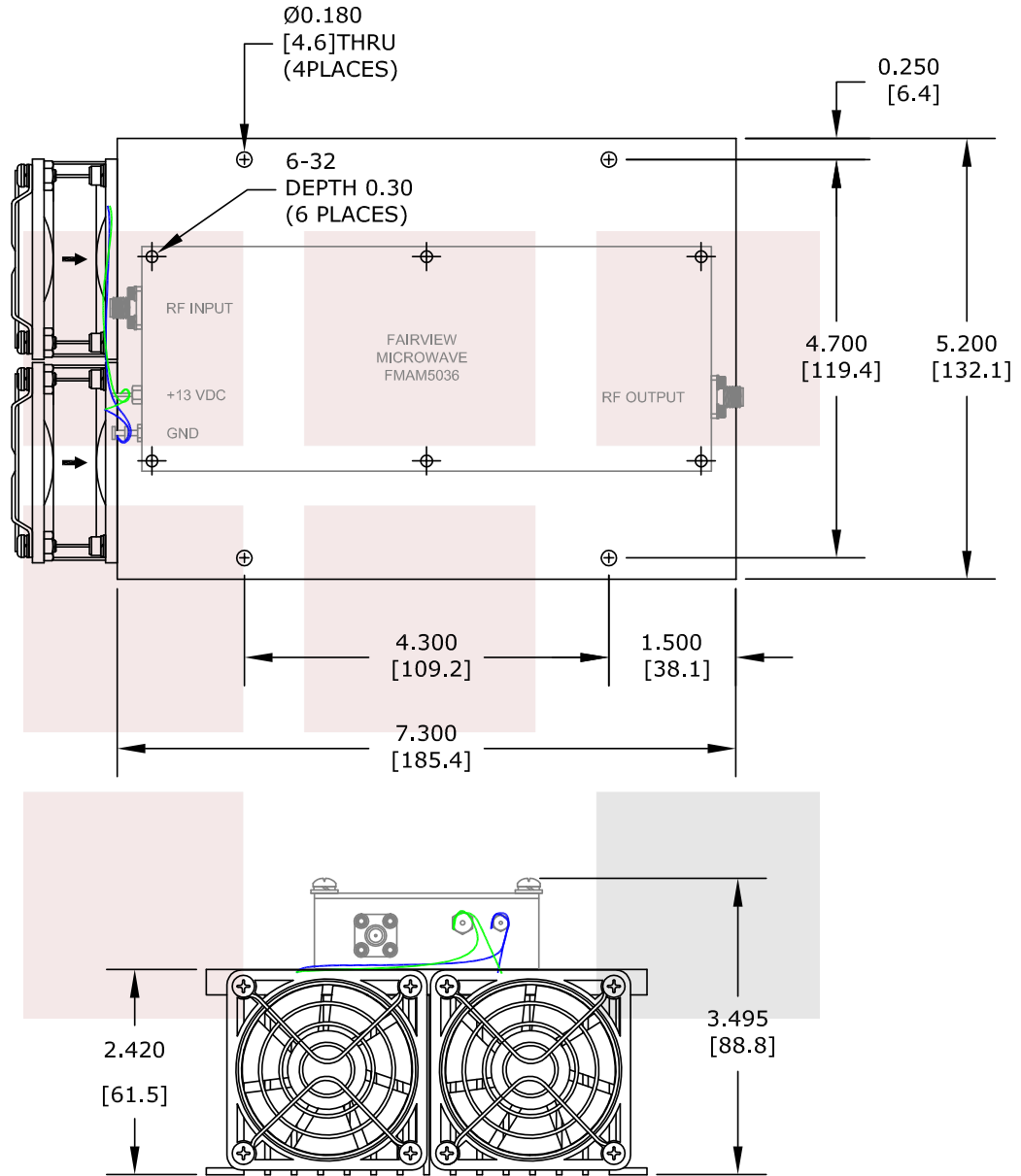
For additional information on this product, please click the following link: [40 dB Gain High Power High Gain Amplifier at 10 Watt Psat Operating From 1 GHz to 2.5 GHz with 49 dBm IP3 and SMA FMAM5036F](http://www.fairviewmicrowave.com/40db-high-power-high-gain-amplifier-10watt-fmam5036f)

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CAD FILE	120114	SHEET	SCALE	N/A	SIZE A 150



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