

High Power Amplifier at 7 Watt P1dB Operating From 8.5 GHz to 10.5 GHz with 36 dB Gain, 47 dBm IP3 and SMA

The FMAM5044 is a power coaxial amplifier operating in the 8.5 to 10.5 GHz frequency range. The amplifier offers 38.5 dBm typ of P1dB power and a high 36 dB typical small signal gain with the gain flatness of ± 1.5 dB typ. Input/output ports are matched for 50 ohms and are AC coupled. 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 +70°C.

Electrical Specifications (TA = +25°C, DC Voltage = 12Volts , DC Current = 4,000mA)

Description	Min	Typ	Max	Unit
Frequency Range	8.5		10.5	GHz
Small Signal Gain	33	36		dB
Gain Flatness		± 1.5	± 1.8	dB
P1dB	+37.5	+38.5		dBm
Output 3rd Order Intercept Point		+47		dBm
Input VSWR			2:1	
Output VSWR			2:1	
Operating DC Voltage	11	12	13	Volts
Operating DC Current		4,000		mA
Operating Temperature Range	-40		+70	°C

Mechanical Specifications

Size	
Length	2.36 in [59.94 mm]
Width	2.91 in [73.91 mm]
Height	0.63 in [16 mm]
Weight	0.366 lbs [166.01 g]
Input Connector	SMA Female
Output Connector	SMA Female

Environmental Specifications

Temperature	
Operating Range	-40 to +70 deg C

Compliance Certifications (see [product page](#) 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.



Features:

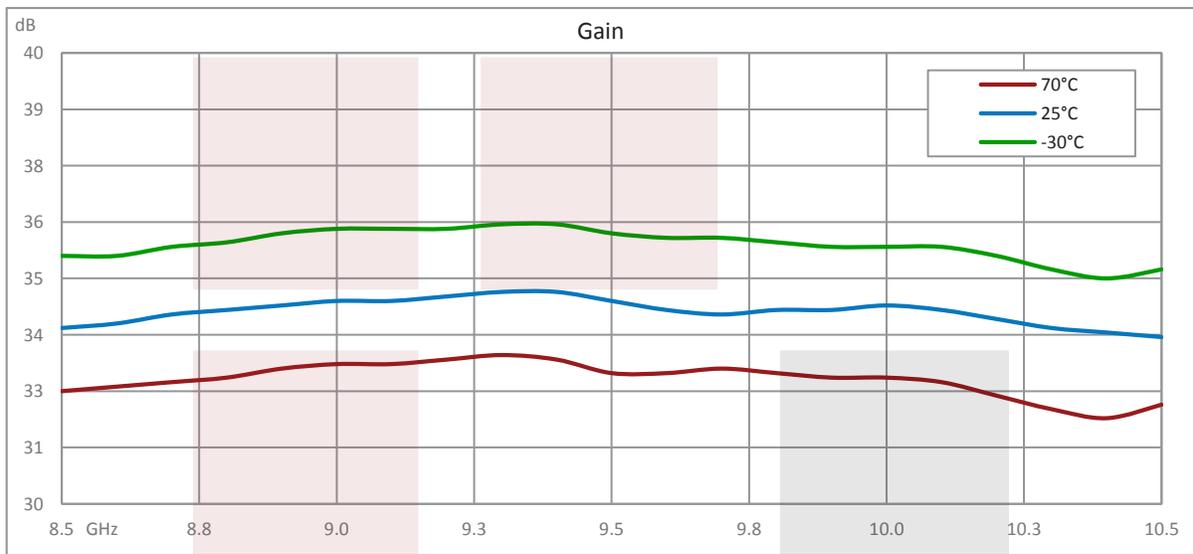
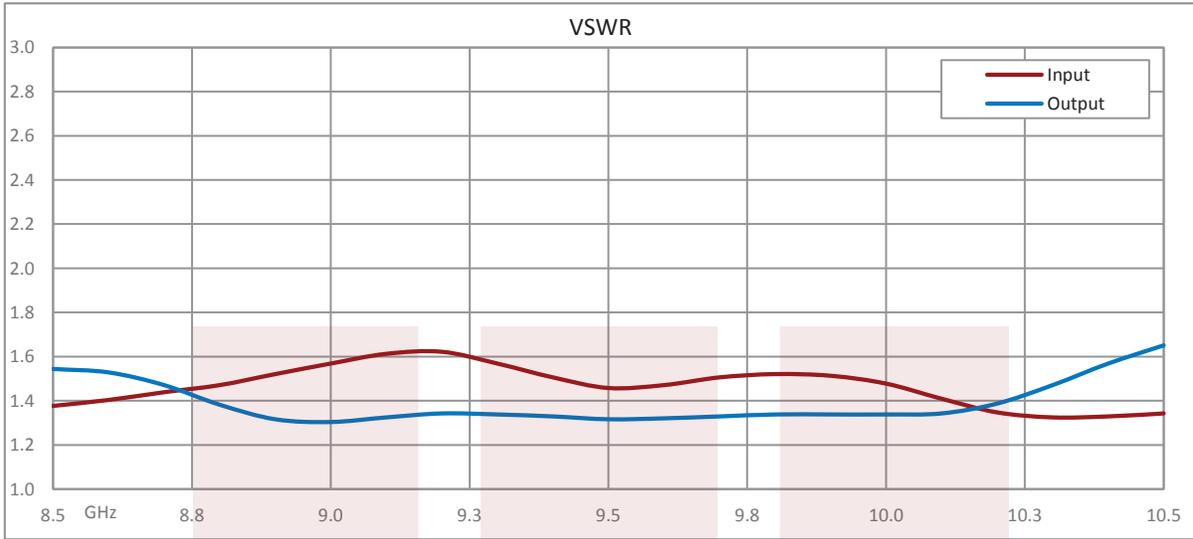
- 8.5 to 10.5 GHz Frequency Range
- P1dB +38.5 dBm typ
- Small Signal Gain: 36 dB typ
- Gain Flatness ± 1.5 dB typ
- 50 Ohms Input and Output Matched
- Unconditionally Stable
- Regulated Supply

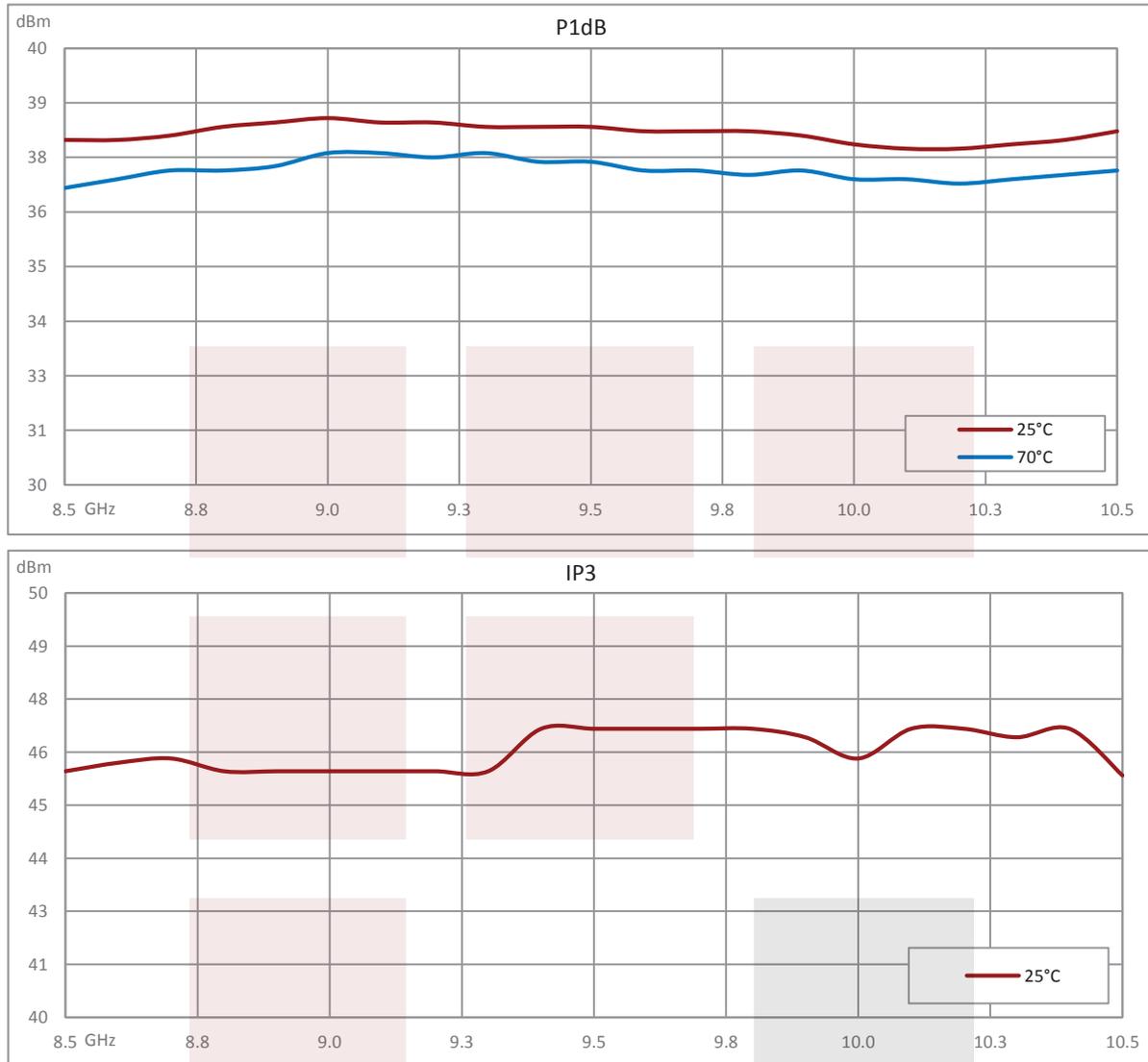
Applications:

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

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Typical Performance Data



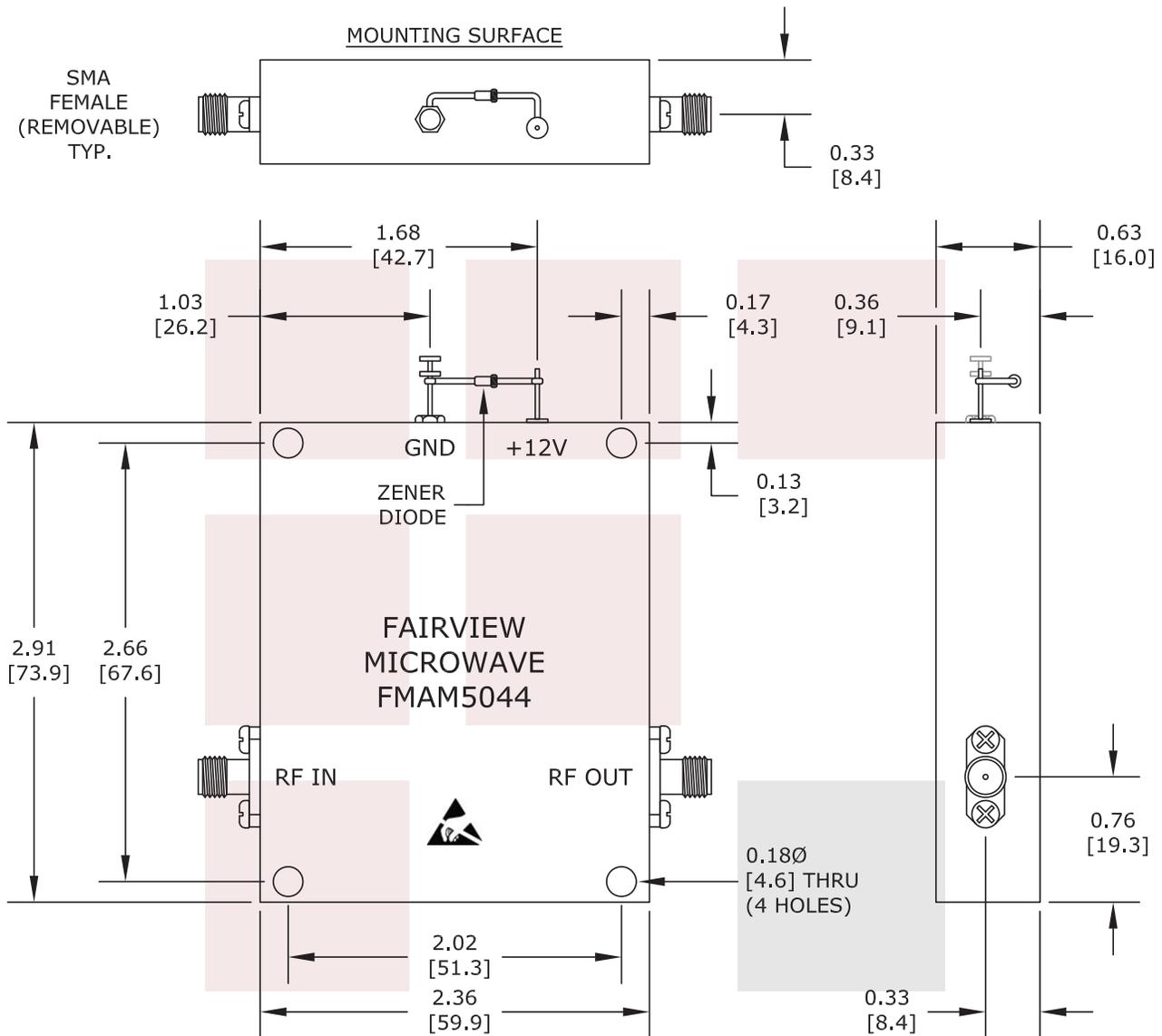


High Power Amplifier at 7 Watt P1dB Operating From 8.5 GHz to 10.5 GHz with 36 dB Gain, 47 dBm IP3 and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [High Power Amplifier at 7 Watt P1dB Operating From 8.5 GHz to 10.5 GHz with 36 dB Gain, 47 dBm IP3 and SMA FMAM5044](#)

URL: <https://www.fairviewmicrowave.com/high-power-amplifier-7watt-36db-fmam5044-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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TITLE High Power Amplifier at 7 Watt P1dB Operating From 8.5 GHz to 10.5 GHz with 36 dB Gain, 47 dBm IP3 and SMA		DWG NO FMAM5044		CAGE CODE 3FKR5	
CAD FILE 032416		SHEET		SCALE N/A	
		SIZE A		2233	