

Medium Power Amplifier at 1 Watt P1dB Operating From 820 MHz to 960 MHz with 15 dB Gain, 46 dBm IP3 and SMA

The FMAM4026 is an ISM band 1W high dynamic range coaxial power amplifier, operating in the 0.82 to 0.96 GHz frequency range and designed for low noise and high linearity applications. The amplifier offers 30 dBm of P1dB and a 15 dB small signal gain, with excellent gain flatness of ± 0.5 dB typ, along with outstanding IP3 performance of +46 dBm typ and 2.0 dB typ Noise Figure. This power amplifier requires only a single positive DC supply, is unconditionally stable, and operates over the temperature range of -40°C to 75°C.

Electrical Specifications (TA = +25°C, DC Voltage = 12Volts, DC Current = 500mA)

Description	Min	Typ	Max	Unit
Frequency Range	820		960	MHz
Small Signal Gain	13	15	17	dB
Gain Flatness		± 0.5	± 0.75	dB
Gain Variation at OTR*		± 1		dB
P1dB	+29	+30		dBm
Output 3rd Order Intercept Point	+43	+46		dBm
Reverse Isolation	18	25		dB
Noise Figure		2	3	dB
Input VSWR		1.4:1	1.5:1	
Output VSWR		1.4:1	1.5:1	
Operating DC Voltage	8		12	Volts
Operating DC Current		500	650	mA
Operating Temperature Range	-40		+75	°C

*OTR= Base Plate Operating Temperature Range

Absolute Maximum Rating

Parameter	Rating	Units
Source Voltage	+15	Volts
RF input Power	+25	dBm
Operating Temperature (base-plate)	-40 to +75	°C
Storage Temperature	-55 to +125	°C



ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in approved ESD Workstation.

Mechanical Specifications

Size

Length	1.2 in [30.48 mm]
Width	1 in [25.4 mm]
Height	0.4 in [10.16 mm]

Input Connector	SMA Female
Output Connector	SMA Female



Features:

- 0.82 GHz to 0.96 GHz Frequency Range
- P1dB: +30 dBm Typ
- Small Signal Gain: 15 dB Typ
- Gain Flatness: ± 0.5 dB Typ
- Gain Variation: ± 1.0 dB Typ
- Output IP3: +46 dBm Typ
- Noise Figure: 2.0 dB Typ
- Reverse Isolation: 25 dB Typ
- 50 Ohm Input and Output Matched
- -40 to +75°C Operating Temperature
- Unconditionally Stable
- Single DC Positive Supply
- Built-in Voltage Regulator

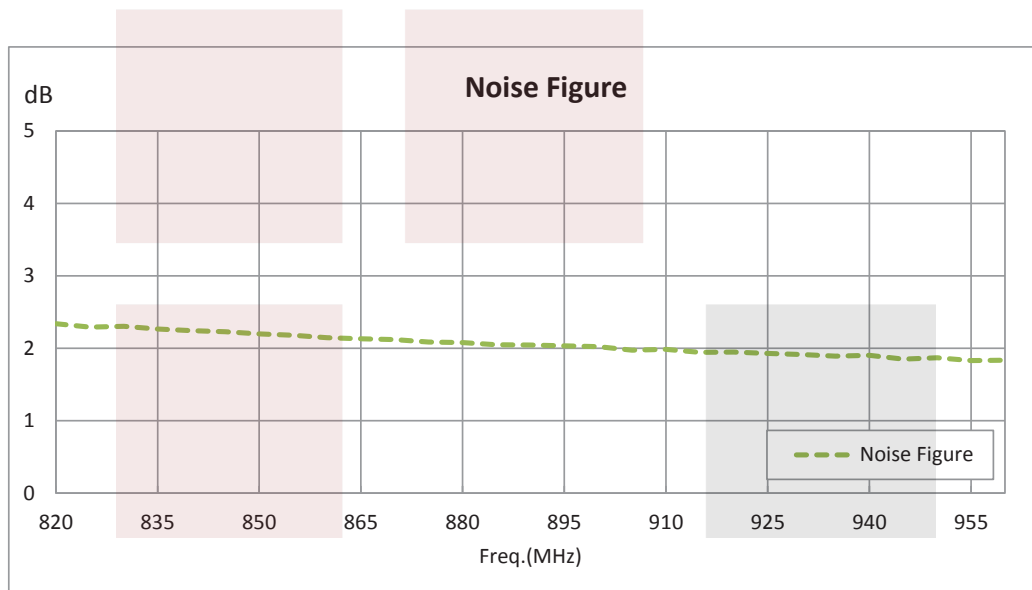
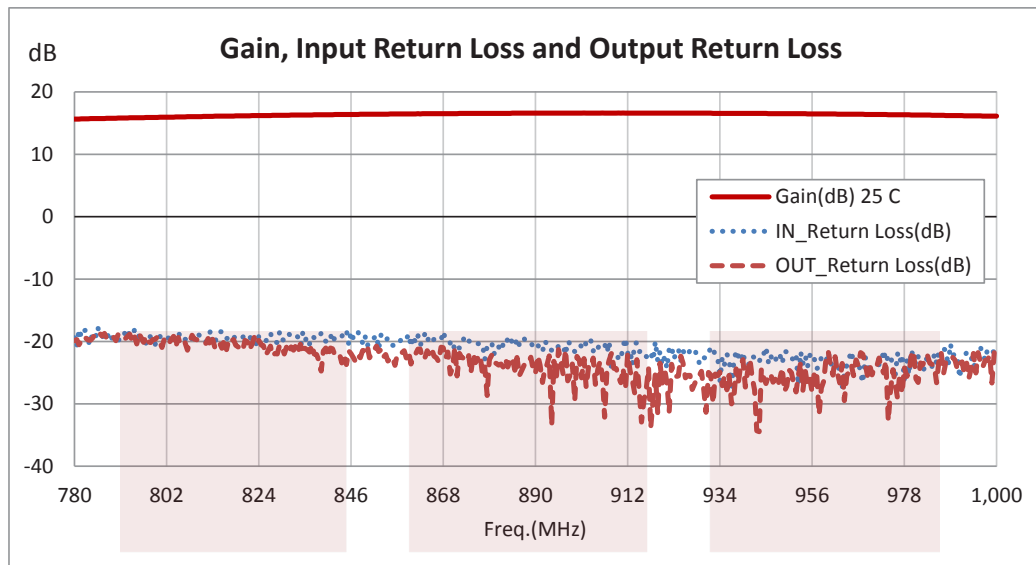
Applications:

- Laboratory Applications
- R&D Labs
- Radar Systems
- Telecom Infrastructure
- Test Instrumentation
- Military & Space
- Communication Systems
- Satellite Communications
- Wireless Communications
- Microwave Radio Systems
- Power Amplifier
- Low Noise Amplifier
- High Dynamic Range Amplifier
- General Purpose Amplification

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Typical Performance Data



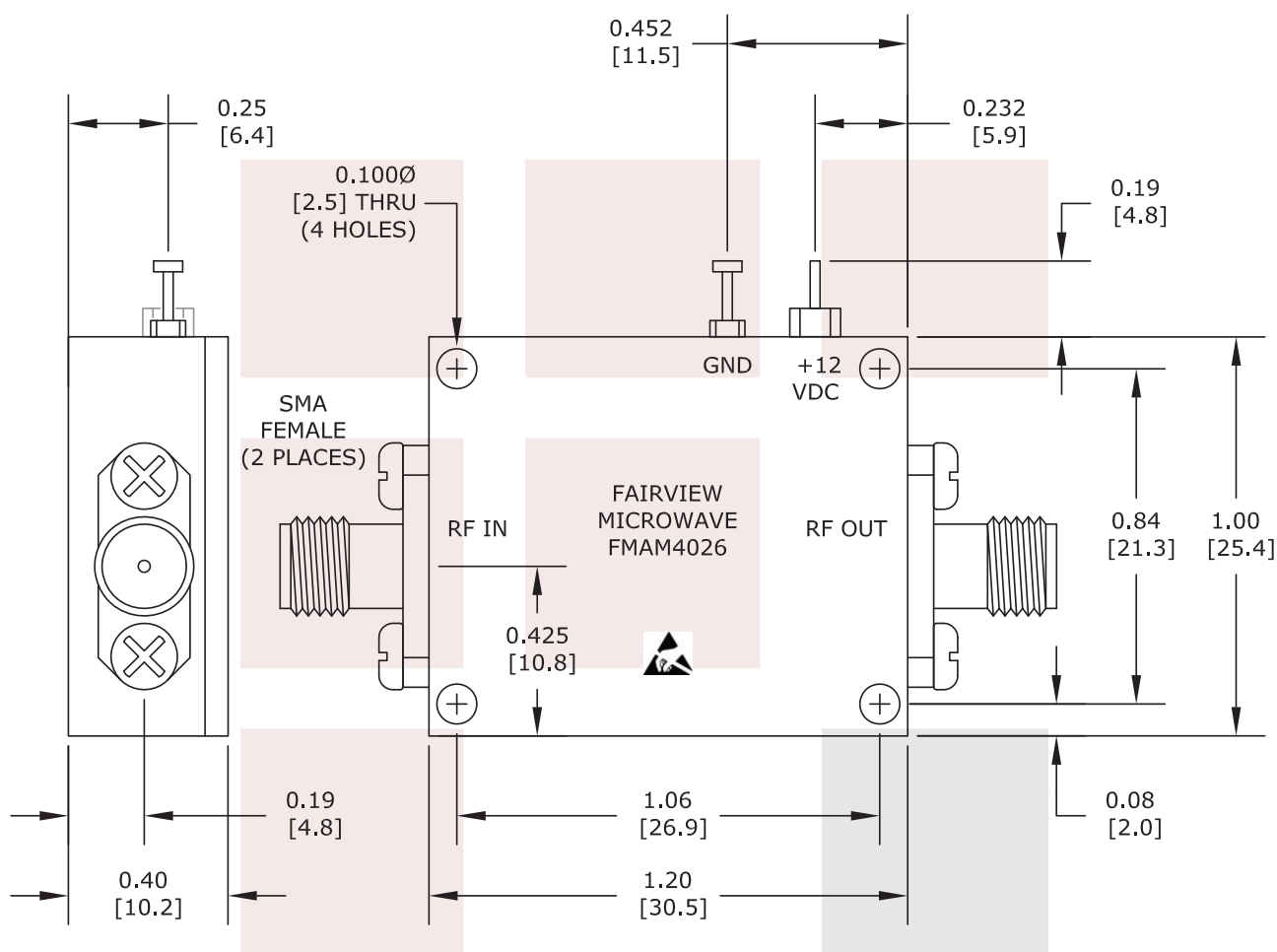
Medium Power Amplifier at 1 Watt P1dB Operating From 820 MHz to 960 MHz with 15 dB Gain, 46 dBm IP3 and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Medium Power Amplifier at 1 Watt P1dB Operating From 820 MHz to 960 MHz with 15 dB Gain, 46 dBm IP3 and SMA FMAM4026](#)

URL: <http://www.fairviewmicrowave.com/medium-power-amplifier-1watt-15db-fmam4026-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 Medium Power Amplifier at 1 Watt P1dB Operating From 820 MHz to 960 MHz with 15 dB Gain, 46 dBm IP3 and SMA		DWG NO FMAM4026		CAGE CODE 3FKR5	
CAD FILE	050115	SHEET	SCALE	N/A	SIZE A 2233