

Medium Power Amplifier at 22 dBm Psat Operating From 26.5 GHz to 40 GHz with 35 dB Gain, 28 dBm IP3 and 2.92mm

The FMAM4050 is a Ka-Band coaxial power amplifier, operating in the 26.5 to 40 GHz frequency range. This amplifier utilizes high power devices that provide excellent linearity and high gain. The amplifier offers 20 dBm of P1dB typical and 30 dB small signal gain typ, with the gain flatness of ± 2 dB max. This power amplifier requires a +12 Volt DC supply, is unconditionally stable, operates over the temperature range of -40°C to 75°C, and is Hermetically sealed.

Electrical Specifications (TA = +25°C, DC Voltage = 12Volts , DC Current = 270mA)

Description	Min	Typ	Max	Unit
Frequency Range	26.5		40	GHz
Small Signal Gain	30	35	40	dB
Gain Flatness		± 3	± 4	dB
Gain Variation at OTR*		± 2.5		dB
Input Power (CW)			+6	dBm
Psat	+20	+22		dBm
P1dB	+19	+20		dBm
Output 3rd Order Intercept Point	+25	+28		dBm
Reverse Isolation		50		dB
Noise Figure		4.5	5.5	dB
Spurious			-70	dBc
Input VSWR		1.7:1	2:1	
Output VSWR		2.5:1	3.5:1	
Operating DC Voltage	8	12	15	Volts
Operating DC Current	240	270	320	mA
Operating Temperature Range	-40		+75	°C

*OTR= Base Plate Operating Temperature Range

Absolute Maximum Rating

Parameter	Rating	Units
Source Voltage	+13	Volts
RF input Power	+6	dBm
Operating Temperature	-55 to +125	°C
Storage Temperature	-40 to +75	°C



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

Mechanical Specifications

Size	
Length	1.5 in [38.1 mm]
Width	1 in [25.4 mm]
Height	0.4 in [10.16 mm]
Weight	0.0805 lbs [36.51 g]
Input Connector	2.92mm Female



Features:

- 26.5 to 40 GHz Frequency Range
- P1dB: 20 dBm typ
- Small Signal Gain: 35 dB typ
- Gain Flatness: ± 3 dB max
- 50 Ohm Input and Output Matched
- -40 to 75°C Operating Temperature
- Unconditionally Stable
- Single +12VDC Supply
- Voltage Regulator

Applications:

- Ka-band Satellite Communication
- Commercial SATCOM
- Point-to-Point Radio
- Point-to-Multipoint Radio
- Communication Systems
- VSAT
- R&D Labs
- Radar Systems
- Communication Systems
- High Power Output Amplifier

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Output Connector 2.92mm Female

Environmental Specifications

Temperature
 Operating Range -40 to +75 deg C
 Storage Range -45 to +125 deg C

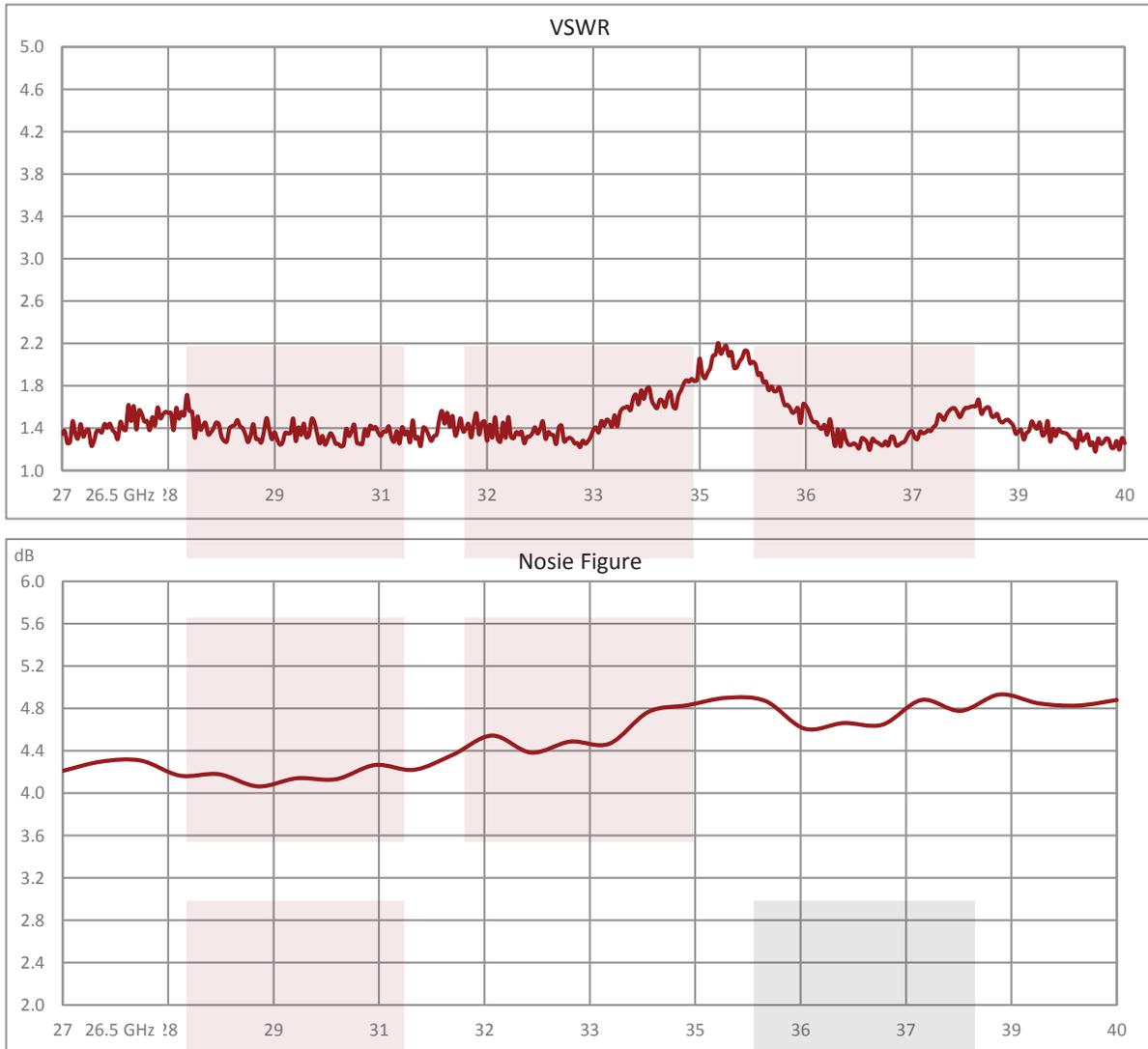
Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

- Notes:
- Values at 25 °C, sea level
 - Small Signal Gain at +25°C Base Plate Temperature

Typical Performance Data



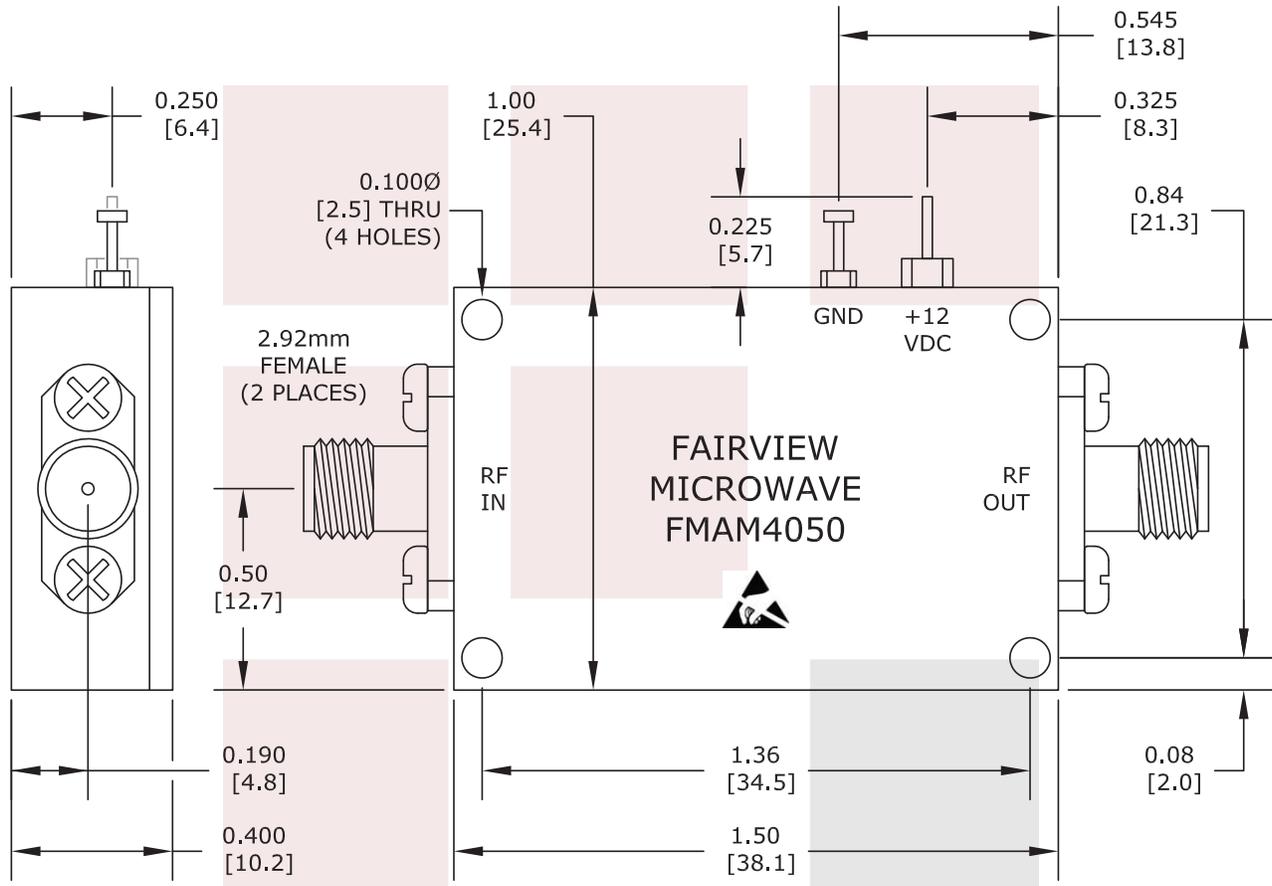


Medium Power Amplifier at 22 dBm Psat Operating From 26.5 GHz to 40 GHz with 35 dB Gain, 28 dBm IP3 and 2.92mm from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Medium Power Amplifier at 22 dBm Psat Operating From 26.5 GHz to 40 GHz with 35 dB Gain, 28 dBm IP3 and 2.92mm FMAM4050](https://www.fairviewmicrowave.com/medium-power-amplifier-22dbm-35db-fmam4050-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 22 dBm Psat Operating From 26.5 GHz to 40 GHz with 35 dB Gain, 28 dBm IP3 and 2.92mm		DWG NO FMAM4050		CAGE CODE 3FKR5	
CAD FILE 071816		SHEET	SCALE N/A	SIZE A	2233