

15 dB Gain Block Amplifier Operating From 10 MHz to 3 GHz with 11 dBm P1dB and SMA

The FMAM28 is a low noise RF coaxial amplifier operating in the 10 MHz to 3 GHz frequency range. The amplifier offers noise figure of 3.0 dB typical, 11 dBm typical P1dB, and 15 dB small signal gain. This exceptional technical performance is achieved through the use of a hybrid MIC design and advanced SiGe HBT technology. The low noise amplifier requires an operating voltage between 7-18 VDC. The connectorized SMA module is unconditionally stable and includes built-in voltage regulation and bias sequencing.

Electrical Specifications (TA = +25°C, DC Voltage = 18Volts, DC Current = 40mA)

Description	Min	Typ	Max	Unit
Frequency Range	0.01		3	GHz
Small Signal Gain		15		dB
Gain Flatness		±2		dB
Output 3rd Intercept Point	+10.5	+12		dBm
Noise Figure		3		dB
Operating DC Voltage	7		18	Volts
Operating DC Current		40		mA
Operating Temperature Range	-40		+70	°C

RF Characteristic

Description	F1	F2	F3	Units
Frequency Range	0.01 to 1	1 to 2	2 to 3	GHz
Small Signal Gain	16.5	15.2	14	dB
Input Return Loss	19	15	14	dB
Output Return Loss	20	16	16	dB
Output at P1dB	+11.5	+11	+10	dBm
Output 3rd Intercept Point	12.3	12	10.5	dBm



Features:

- 10 MHz to 3 GHz frequency range
- P1db:11dbm Typ
- Small Signal Gain: 15 db Typ
- Noise Figure: 3.0 db Typ
- SiGe HBT Technology
- 50 Ohm Input and Output Matched
- Unconditionally Stable
- Single DC Positive Supply With EMI Filter
- Built-in voltage regulator
- Compact Aluminum Case

Applications:

- Laboratory Applications
- R&D Labs
- RADAR Systems
- Telecom Infrastructure
- Test Instrumentation
- Communication Systems
- UMTS
- Wireless Communication
- Microwave Radio Systems
- Cellular Base Station, Repeaters
- Low Noise Amplifier
- General Purpose Amplification
- General Purpose Wireless
- GSM
- Wideband Gain Block
- IF Amplifier/RF Driver Amp
- RF Wideband Front Ends
- RF Pre Amplification
- Satellite

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Mechanical Specifications

Size

Length	1.38 in [35.05 mm]
Width	0.5 in [12.7 mm]
Height	1.18 in [29.97 mm]
Input Connector	SMA Female
Output Connector	SMA Female

Environmental Specifications

Temperature

Operating Range	-40 to +70 deg C
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Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

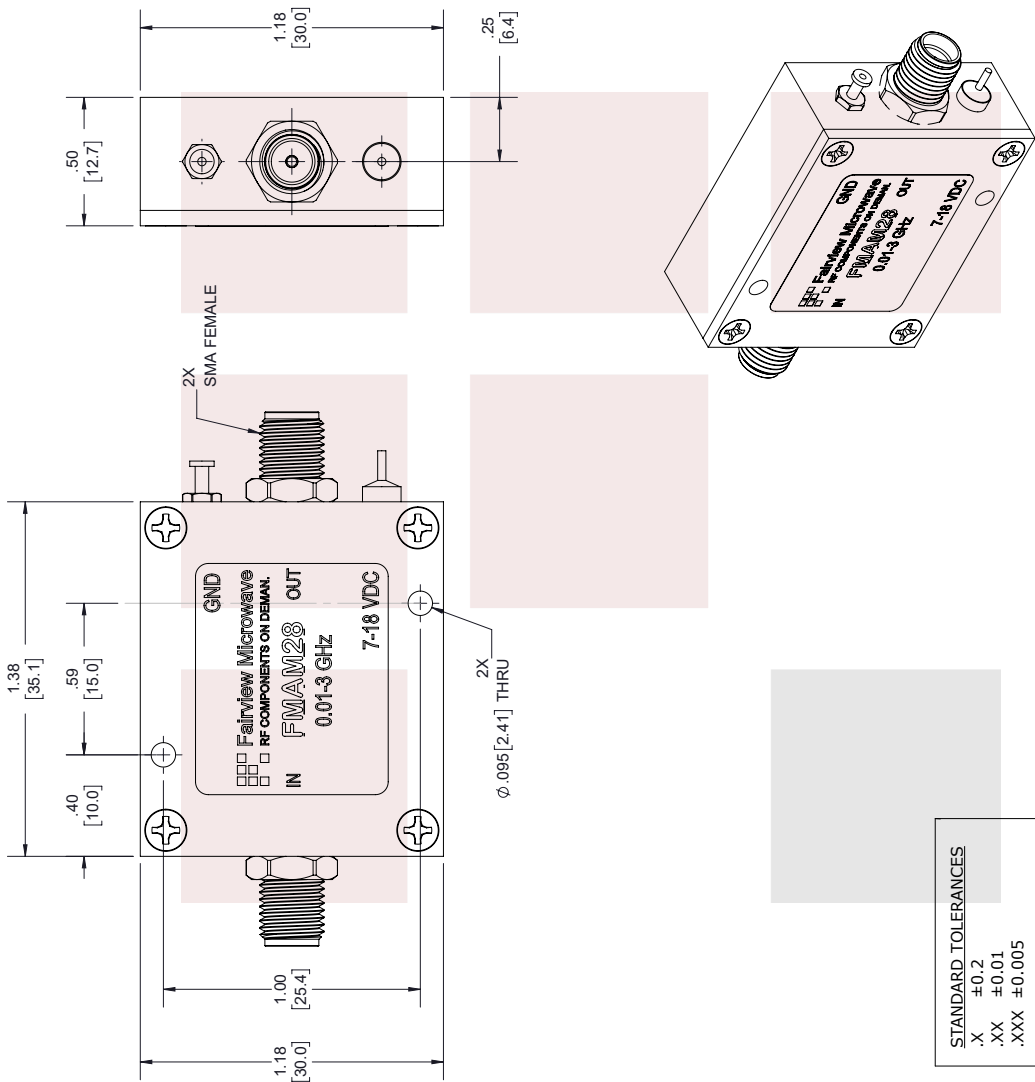
- Values at 25 °C, sea level

15 dB Gain Block Amplifier Operating From 10 MHz to 3 GHz with 11 dBm P1dB 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: [15 dB Gain Block Amplifier Operating From 10 MHz to 3 GHz with 11 dBm P1dB and SMA FMAM28](#)

URL: <https://www.fairviewmicrowave.com/15-db-gain-block-amplifier-3-ghz-fmam28-p.aspx>

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STANDARD TOLERANCES
.X ±0.2
.XX ±0.01
.XXX ±0.005

*STANDARD TOLERANCES APPLY
ONLY TO DIMENSIONS IN INCHES

FAIRVIEW MICROWAVE INC. ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM		DWG NO		FMAM28		CAGE CODE		3FKR5	
		CAD FILE	011118	SHEET	1 OF 1	SCALE	N/A	SIZE	A
TITLE								7361	

NOTES:
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES [mm].

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