

3.2 dB NF Low Noise Amplifier, Operating from 0.01 MHz to 2 GHz with 28 dB Gain, 13 dBm P1dB and SMA

The FMAM1059 is a low noise coaxial amplifier operating in the 0.01 MHz to 2000 MHz frequency range. Impressive typical performance includes 3.2 dB noise figure, 28 dB small signal gain, +13 dBm P1dB, and an output 3rd order intercept point of +23 dBm. This exceptional technical performance is achieved through the use of a hybrid MIC design and advanced GaAs pHEMT devices. The low noise amplifier requires a +12V DC power supply, and operates over a temperature range of -40°C to +75°C. The rugged and compact package supports SMA Female connectors and RFI and Ground pins. And for highly reliable operation, the model is guaranteed to meet MIL-STD-202 environmental test conditions for Humidity, Shock, Vibration, and Altitude.

Electrical Specifications (TA = +25°C, DC Voltage = 12Vdc, DC Current = 45mA)

Description	Min	Typ	Max	Unit
Frequency Range	10KHz		2	GHz
Small Signal Gain	22	28		dB
Gain Flatness		±2	±2.5	dB
Output at 1 dB Compression Point	+13	+13		dBm
Output 3rd Intercept Point	+21	+23		dBm
Noise Figure		3.2	3.9	dB
Input VSWR		1.5:1	2:1	
Output VSWR		1.4:1	2:1	
Reverse Isolation		-35		dB
Operating DC Voltage	11	12	18	Volts
Operating DC Current		45	55	mA
Operating Temperature Range	-40		+75	°C

Mechanical Specifications

Size	
Weight	0.087 lbs [39.46 g]
Input Connector	SMA Female
Output Connector	SMA Female

Environmental Specifications

Temperature	
Operating Range	-40 to +75 deg C
Storage Range	-55 to +125 deg C
Humidity	MIL-STD-202F, Method 103B, Condition B
Shock	MIL-STD-202F, Method 213B, Condition B
Vibration	MIL-STD-202F, Method 204D, Condition B
Altitude	MIL-STD-202F, Method 105C, Condition B



Features:

- .01 MHz to 2000 MHz Frequency Range
- Low Noise Figure: 3.2 dB
- High Dynamic Range
- Efficient GaAs pHEMT Design
- Small Signal Gain: 28 dB
- Output P1dB: +13 dBm
- Output IP3: +23 dBm
- Operating Temperature: -40°C to +75°C
- 50 Ohm Input and Output Matched
- DC Power Supply: +12V / 45 mA
- SMA Female Connectors
- Designed to meet MIL-STD-202 Test Conditions

Applications:

- Test & Measurement
- R&D Labs
- General Purpose Amplification
- Aerospace & Defense
- Wireless Infrastructure
- Communication Systems

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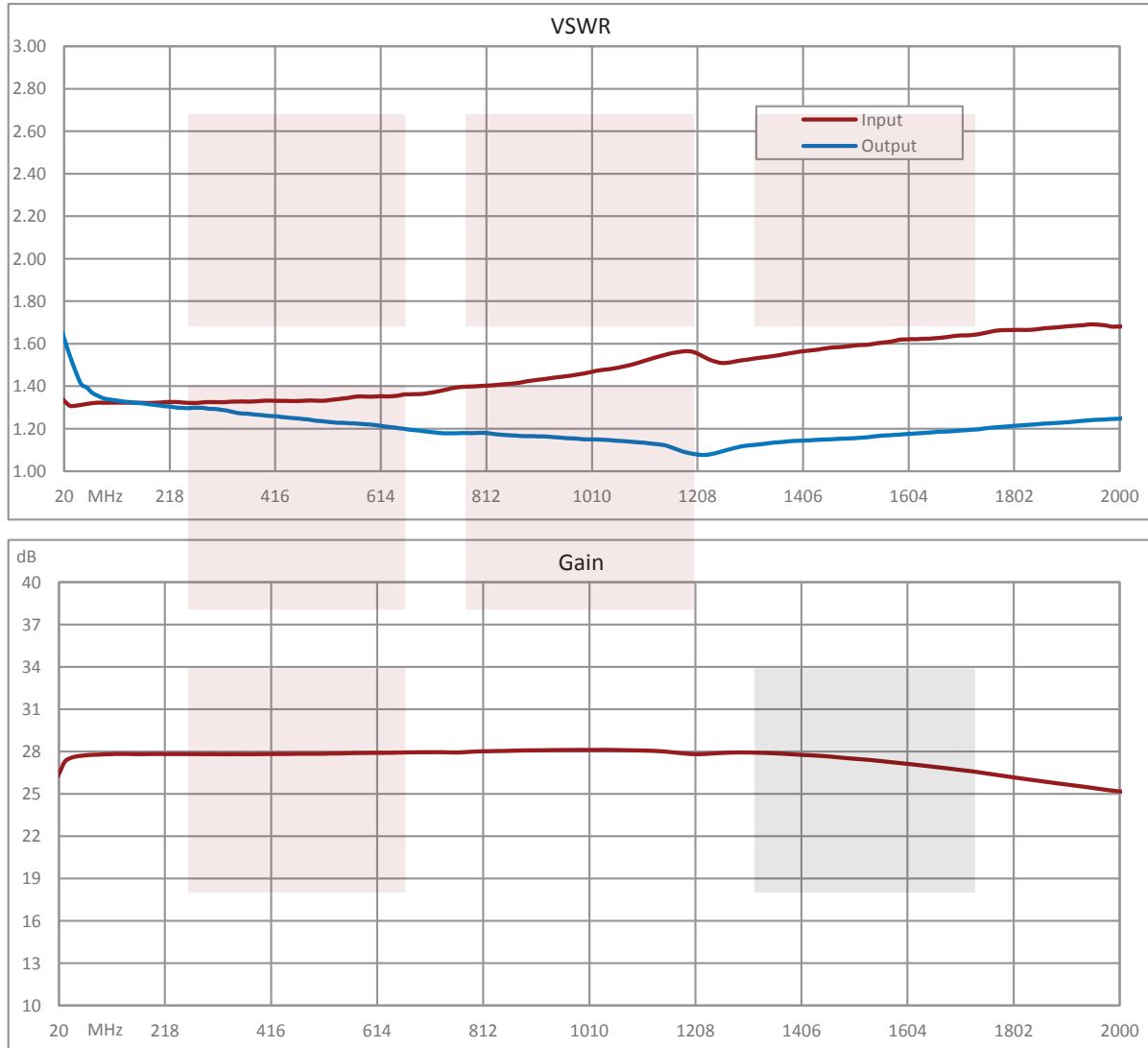
Compliance Certifications (see [product page](#) for current document)

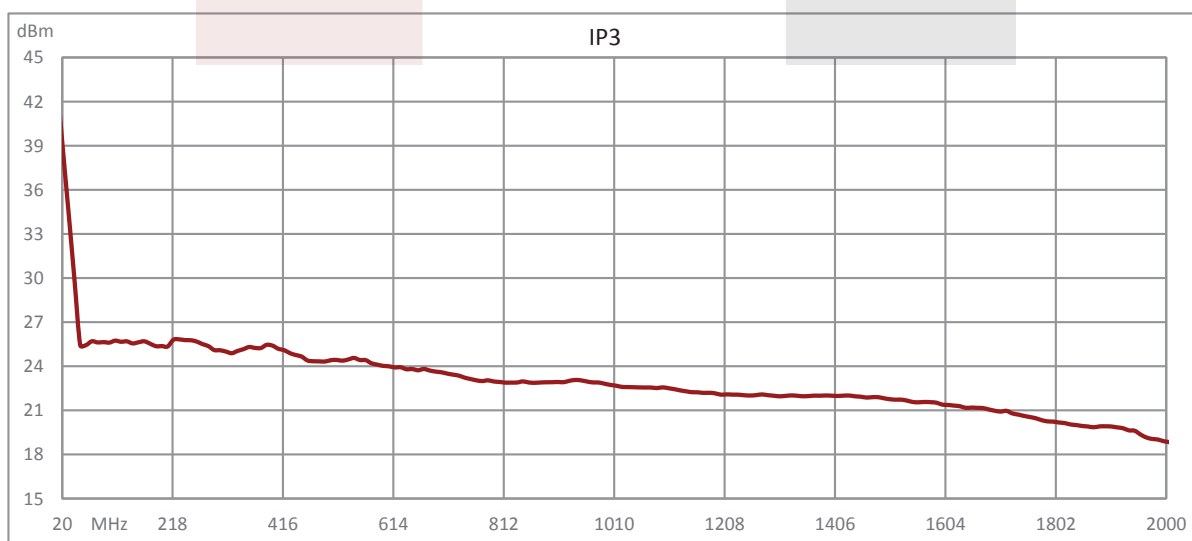
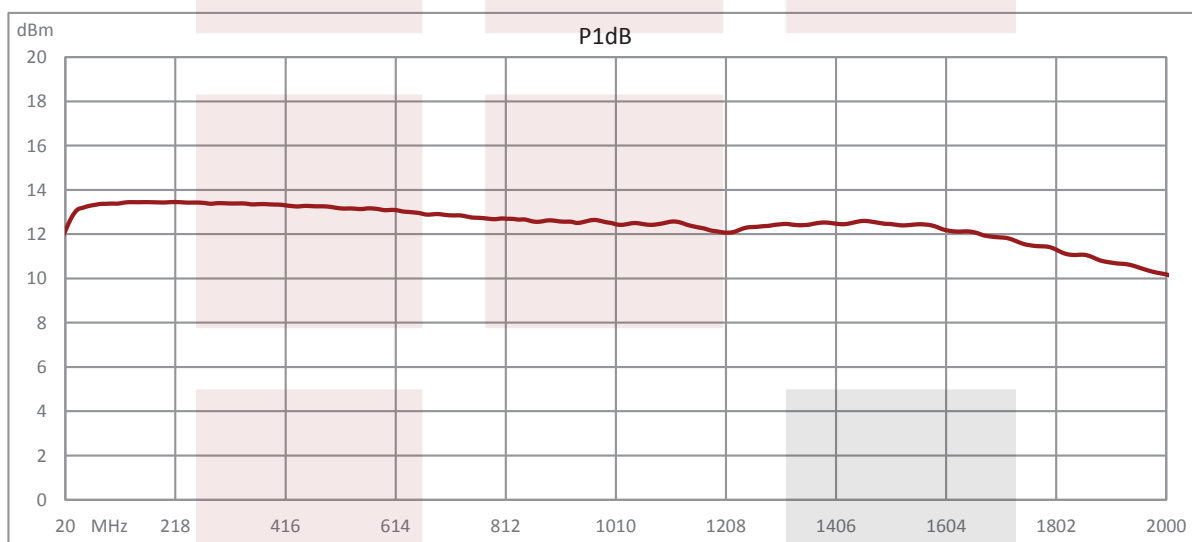
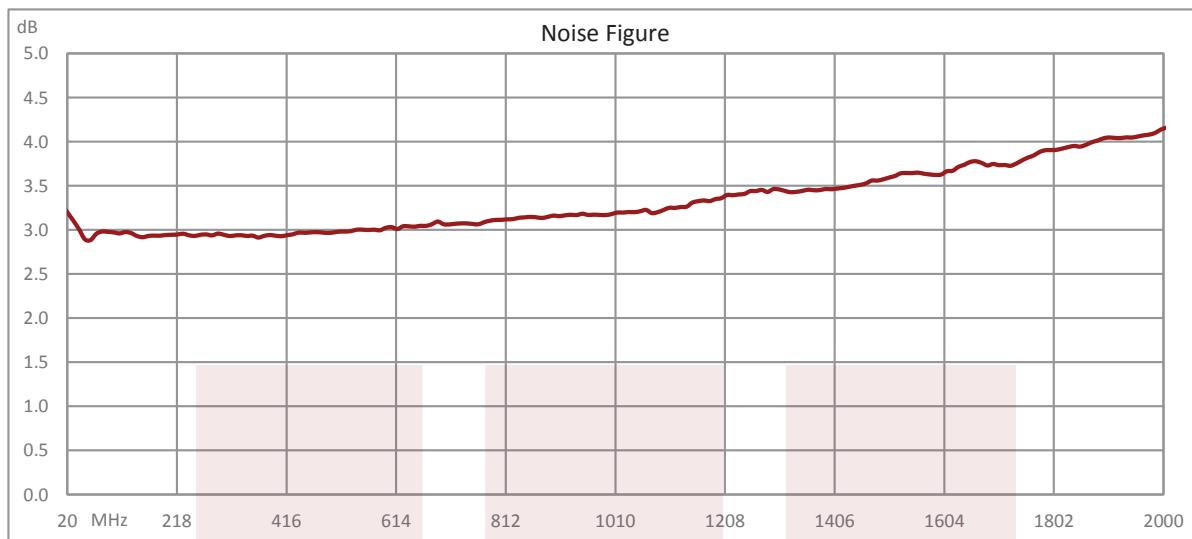
Plotted and Other Data

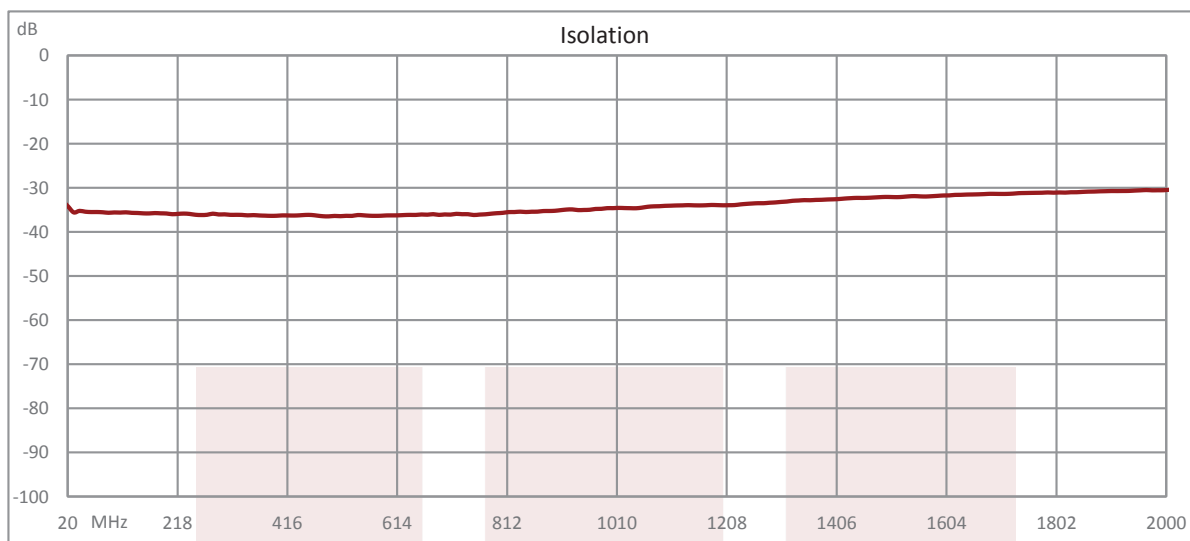
Notes:

- Values at 25 °C, sea level
- ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in approved ESD Workstation.

Typical Performance Data





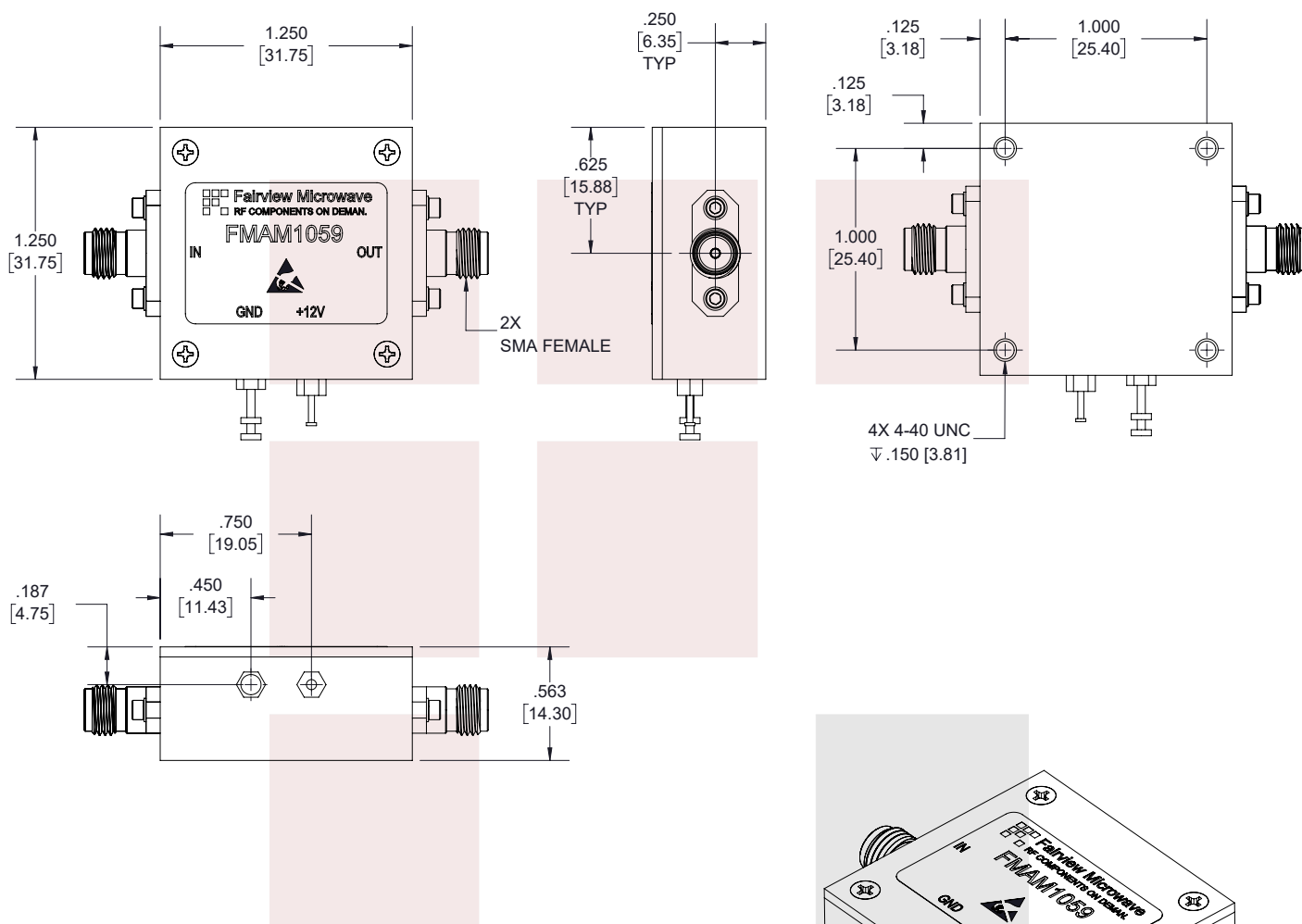


3.2 dB NF Low Noise Amplifier, Operating from 0.01 MHz to 2 GHz with 28 dB Gain, 13 dBm P1dB and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [3.2 dB NF Low Noise Amplifier, Operating from 0.01 MHz to 2 GHz with 28 dB Gain, 13 dBm P1dB and SMA FMAM1059](https://www.fairviewmicrowave.com/3.2db-nf-low-noise-amplifier-28db-fmam1059-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

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].

TITLE

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DWG NO

FMAM1059

CAGE CODE

3FKR5

CAD FILE

04/23/18

SHEET

1 OF 1

SCALE N/A

SIZE A

7361