Fairview Microwave
RF COMPONENTS ON DEMAND. Done!

FMAM1072
DATA SHEET

2.1 dB NF Low Noise Amplifier, Operating from 6 GHz to 12 GHz with 25 dB Gain, 13 dBm Psat and SMA

The FMAM1072 is a low noise coaxial amplifier operating in the 6000 MHz to 12000 MHz frequency range. Impressive typical performance includes 2.1 dB noise figure, 25 dB small signal gain, +11 dBm P1dB, and an output 3rd order intercept point of +25 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 +5V DC power supply, and operates over a temperature range of -40°C to +85°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.

Features:

- 6000 MHz to 12000 MHz Frequency Range
- Low Noise Figure: 2.1 dB
- High Dynamic Range
- Efficient GaAs pHEMT Design
- Small Signal Gain: 25 dB
- Output P1dB: +11 dBm
- Output IP3: +25 dBm
- Operating Temperature: -40°C to +85°C
- 50 Ohm Input and Output Matched
- DC Power Supply: +5V / 65 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

Electrical Specifications (TA = +25°C , DC Voltage = 5Vdc , DC Current = 65mA)

Description	Min	Typ	Max	Unit
Frequency Range	6		12	GHz
Small Signal Gain	22	25		dB
Gain Flatness		±0.7	±1	dB
Gain Variation Over Temperature		0.02		dB/°C
Output at 1 dB Compression Point	+11	+11		dBm
Saturated Output Power (Psat)	+11	+13		dBm
Output 3rd Intercept Point	+23	+25		dBm
Noise Figure		2.1	2.5	dB
Input VSWR		1.4:1	2:1	
Output VSWR		1.4:1	2:1	
Reverse Isolation		-40		dB
Operating DC Voltage	4.5	5	5.5	Volts
Operating DC Current		65	75	mA
Operating Temperature Range	-40		+85	°C

Mechanical Specifications

Size

Weight	0.051 lbs [23.13 g]
Input Connector	SMA Female
Output Connector	SMA Female

Environmental Specifications

Temperature

Operating Range	-40 to +85 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

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sales@fairviewmicrowave.com

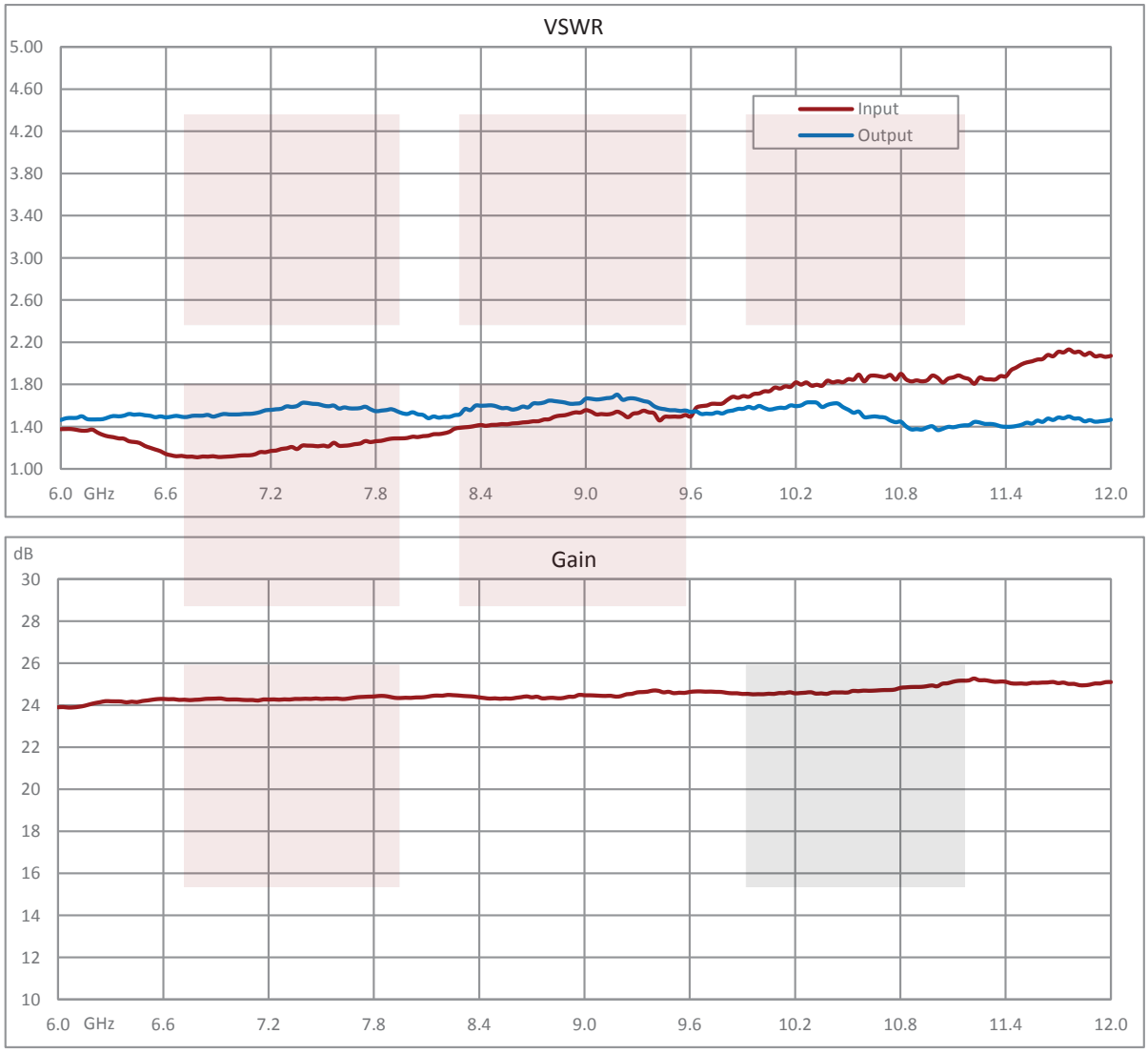
Compliance Certifications (see product page for current document)

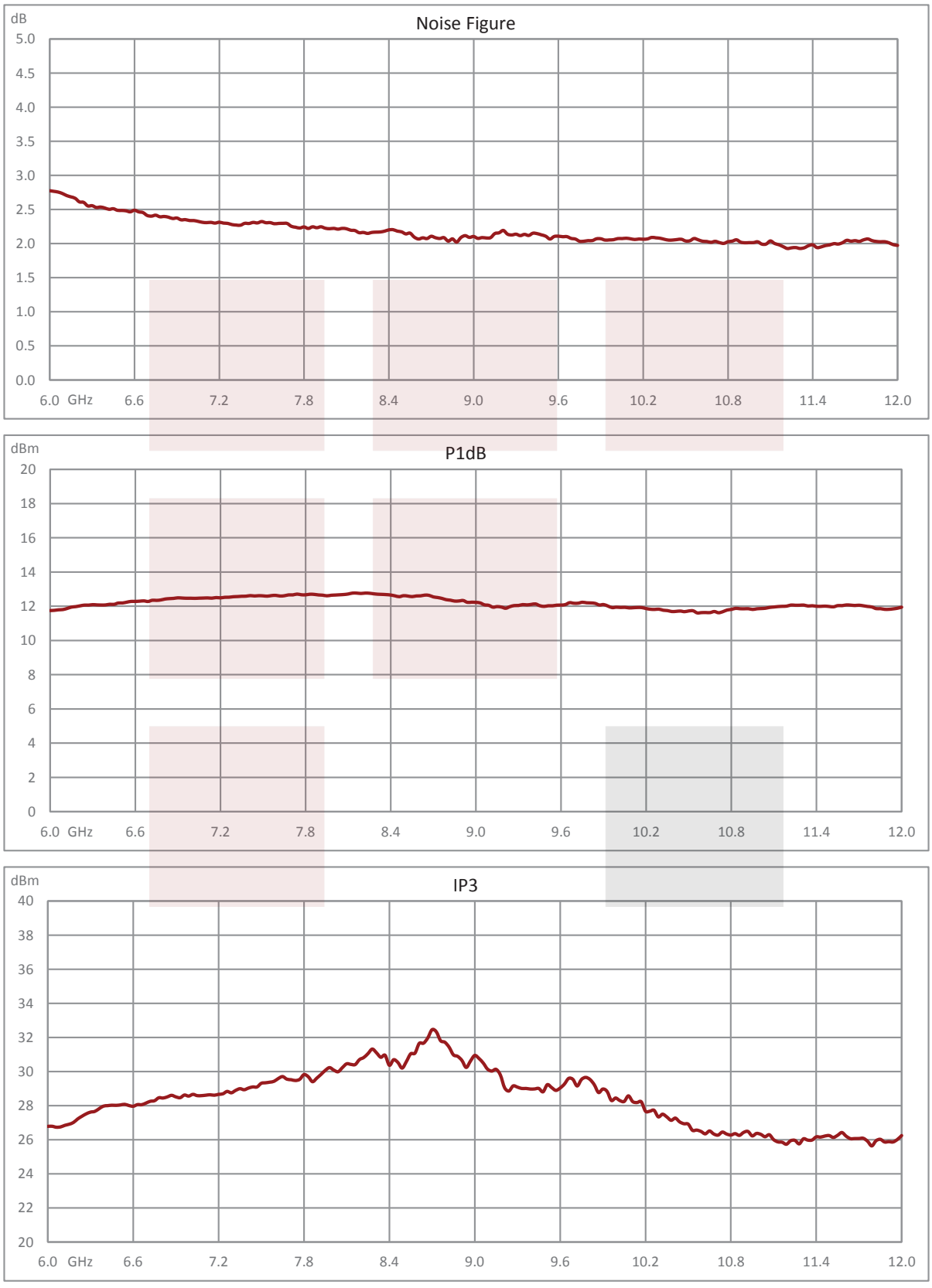
Plotted and Other Data

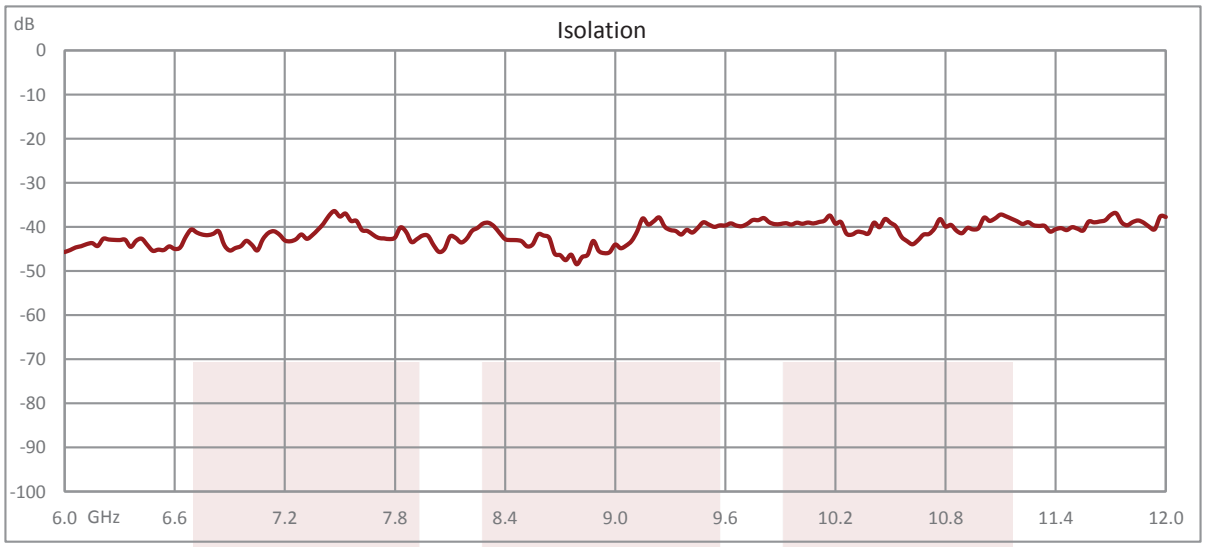
Notes:

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

Typical Performance Data



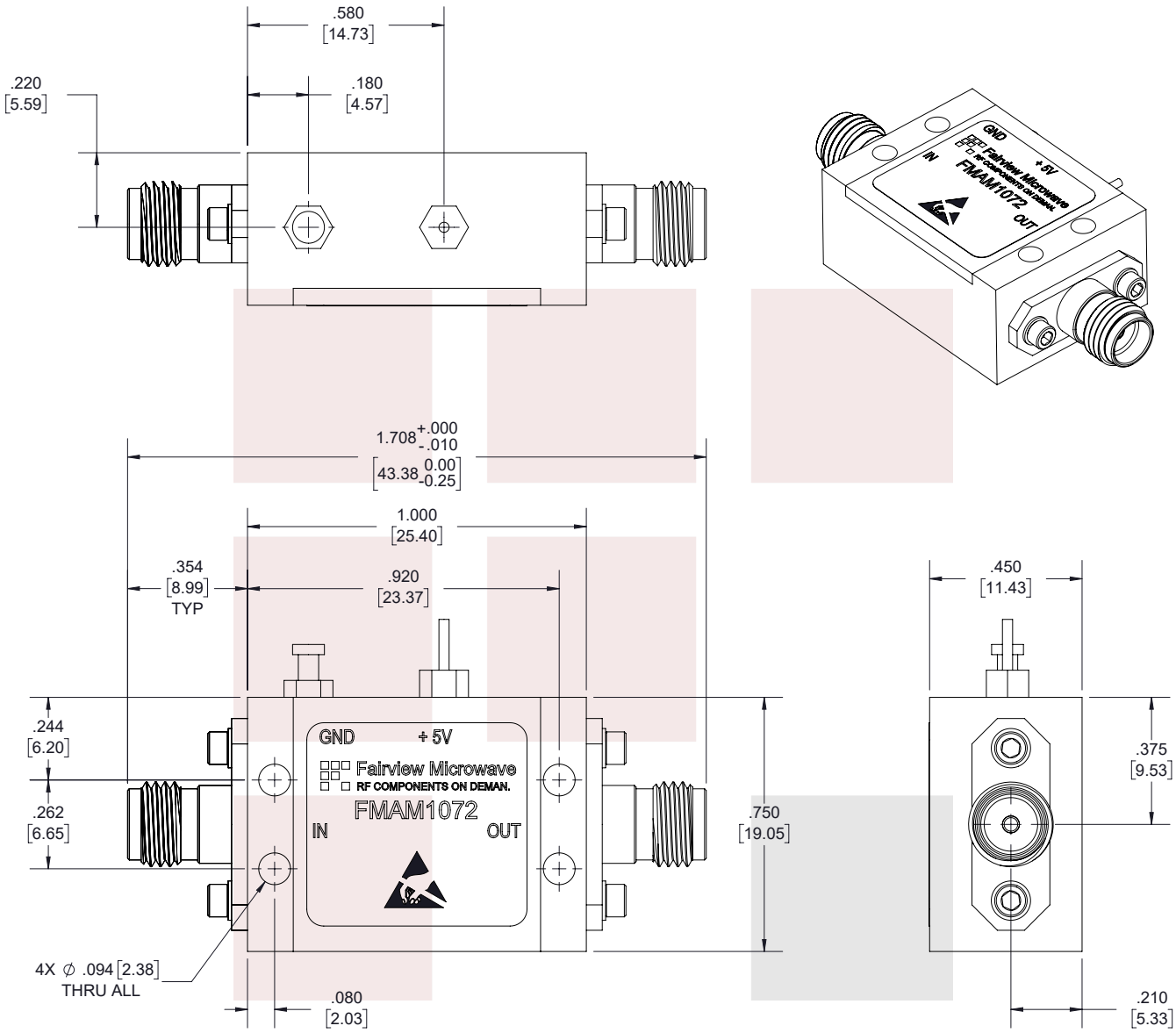




2.1 dB NF Low Noise Amplifier, Operating from 6 GHz to 12 GHz with 25 dB Gain, 13 dBm Psat and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: 2.1 dB NF Low Noise Amplifier, Operating from 6 GHz to 12 GHz with 25 dB Gain, 13 dBm Psat and SMA FMAM1072

URL: https://www.fairviewmicrowave.com/2.1db-nf-low-noise-amplifier-25db-fmam1072-p.aspx



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

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

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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	DWG NO	CAGE CODE
2.1 dB NF Low Noise Amplifier, Operating from 6 GHz to 12 GHz with 25 dB Gain, 13 dBm Psat and SMA	FMAM1072	3FKR5

CAD FILE	SHEET	SCALE	SIZE	
04/23/18	1 OF 1	N/A	A	7361

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