

1.2 dB NF Input Protected Low Noise Amplifier, Operating From 900 MHz to 1.2 GHz with 40 dB Gain, 10 dBm P1dB and SMA

FMAM63005 is a Input Protected Low Noise RF coaxial amplifier operating in the 900 MHz to 1.2 GHz frequency range. The amplifier offers 1.2 dB typical noise figure, 10 dBm typical P1dB and high 40 dB small signal gain with gain flatness of ± 1 dB typical. The low noise amplifier requires typically a 12V DC power supply. The connectorized SMA module is unconditionally stable and includes built-in voltage regulation. This low noise amplifier requires only a single positive supply, is unconditionally stable and operates over the temperature range of -40°C and 75°C .



Electrical Specifications (TA = $+25^{\circ}\text{C}$, DC Voltage = 12Vdc , DC Current = 100mA)

Description	Min	Typ	Max	Unit
Frequency Range	0.9		1.2	GHz
Small Signal Gain		40		dB
Gain Flatness		± 1		dB
Gain Variance at OTR*		1.5		dB
Output at 1 dB Compression Point	+10			dBm
Noise Figure		1.2	1.4	dB
Input VSWR		1.5:1	1.8:1	
Output VSWR		1.4:1	1.6:1	
Spurious			-60	dBc
Input Power (CW)			+30	dBm
Operating DC Voltage		12		Volts
Operating DC Current		100		mA
Operating Temperature Range	-40		+75	$^{\circ}\text{C}$

*OTR= Base Plate Operating Temperature Range

Mechanical Specifications

Size	
Length	1.5 in [38.1 mm]
Width	0.85 in [21.59 mm]
Height	0.375 in [9.53 mm]
Weight	0.053 lbs [24.04 g]
Input Connector	SMA Female
Output Connector	SMA Female

Environmental Specifications

Temperature	
Operating Range	-40 to $+75$ deg C
Storage Range	-50 to $+85$ deg C

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

Plotted and Other Data

- Notes:
- Values at 25°C , sea level

Features:

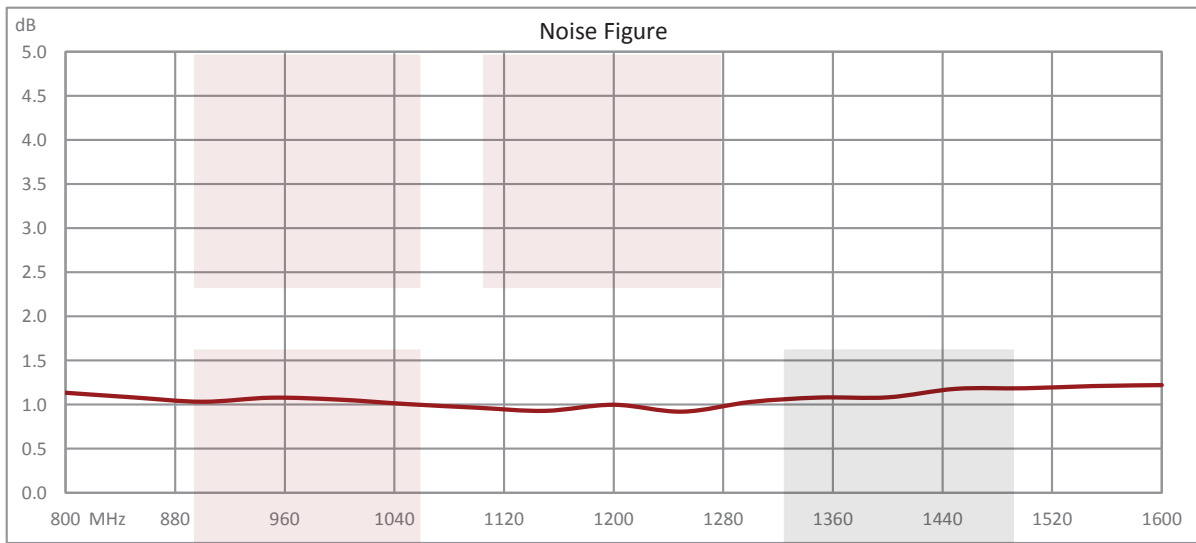
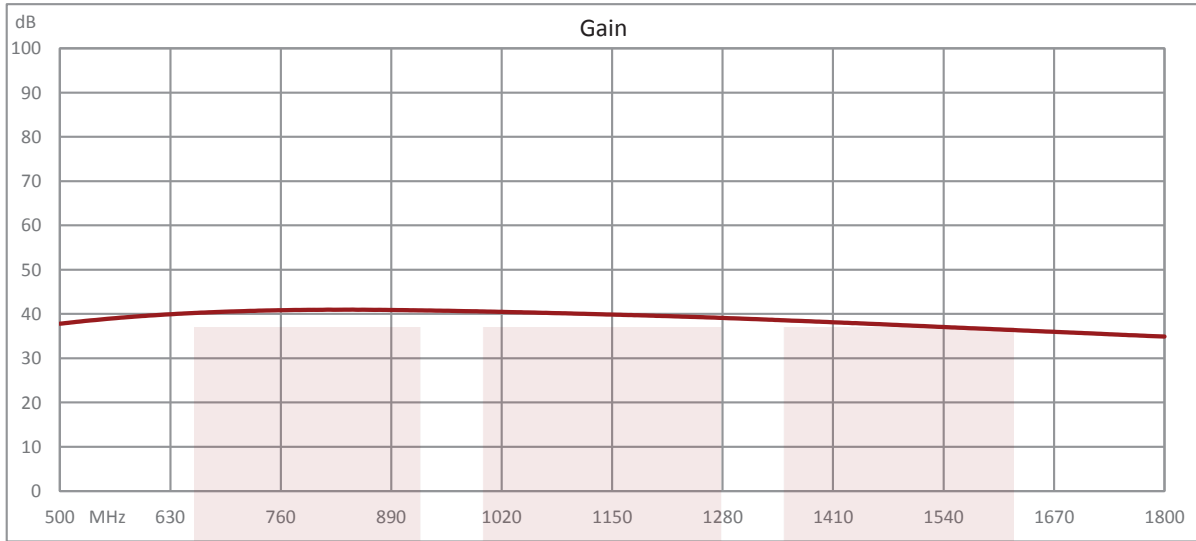
- 900 MHz to 1.2 GHz Frequency Range
- P1dB: 10 dBm
- High Small Signal Gain: 40 dB typical
- Gain Flatness: ± 1 dB
- Gain Variance: ± 1.5 dB
- Noise Figure: 1.2 dB typ
- 50 Ohm Input and Output Matched
- -40 to 75°C Operating Temperature
- Unconditionally Stable
- Single DC Positive Supply
- Built-in Voltage Regulator

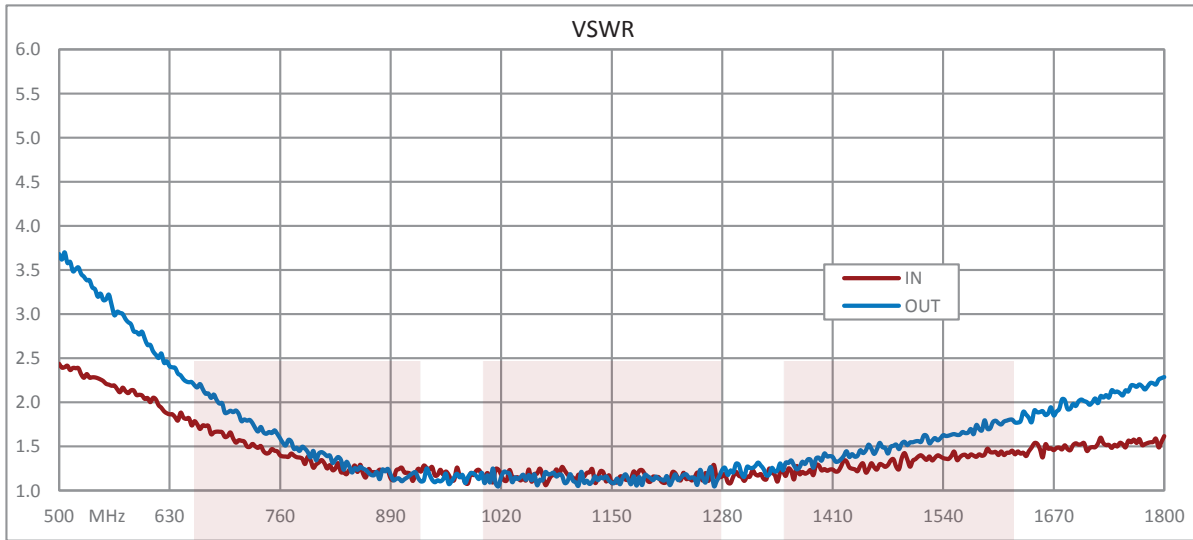
Applications:

- Laboratory Applications
- R&D Labs
- Radar Systems
- Test Instrumentation
- Communication Systems
- Low Noise Amplifier
- General Purpose Amplification
- Wideband Gain Block
- IF Amplifier/RF Driver Amplifier
- RF Wideband Front Ends
- Fixed and Land Mobile

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Typical Performance Data



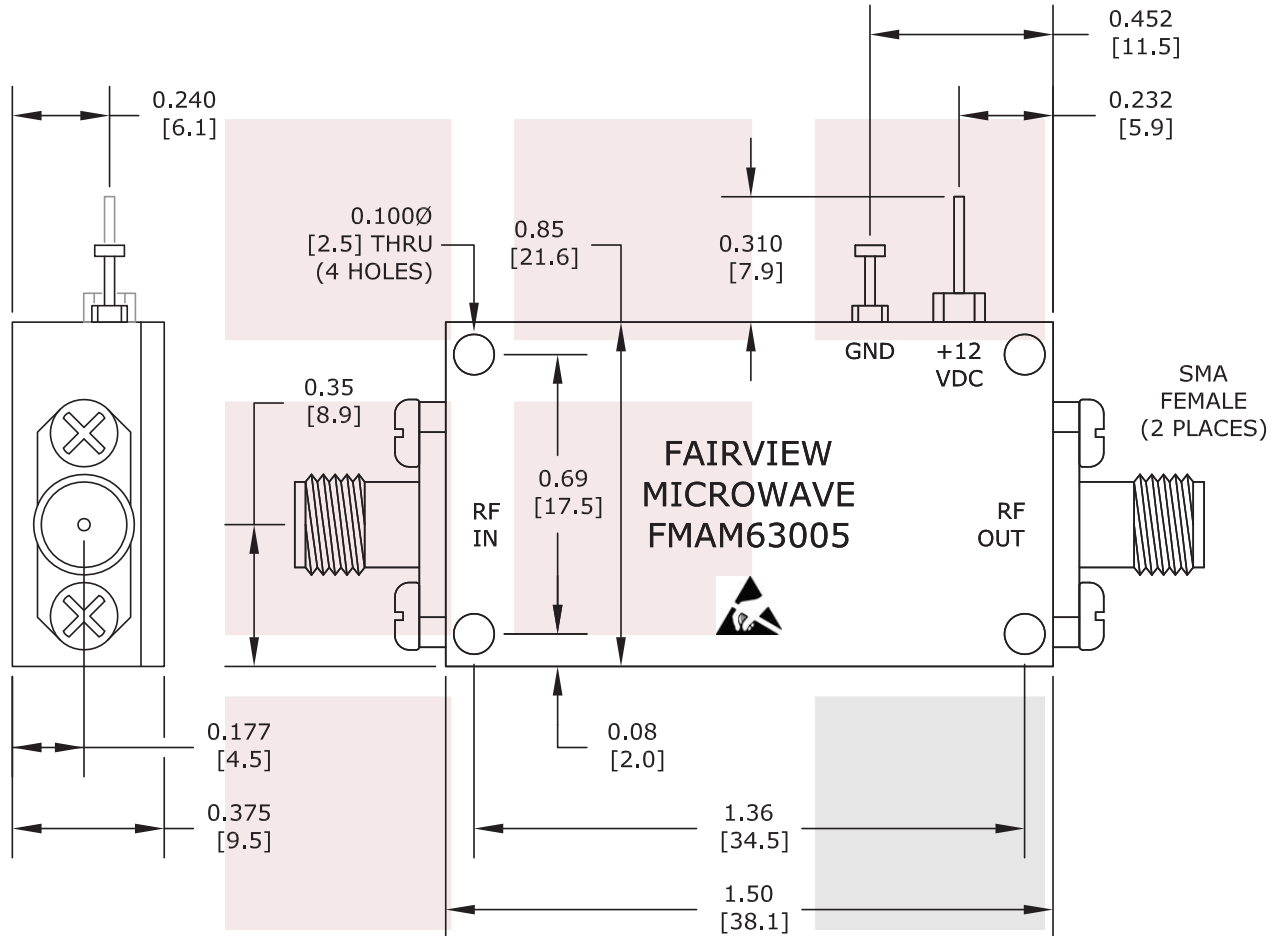


1.2 dB NF Input Protected Low Noise Amplifier, Operating From 900 MHz to 1.2 GHz with 40 dB Gain, 10 dBm P1dB and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [1.2 dB NF Input Protected Low Noise Amplifier, Operating From 900 MHz to 1.2 GHz with 40 dB Gain, 10 dBm P1dB and SMA FMAM63005](https://www.fairviewmicrowave.com/1.2db-nf-low-noise-amplifier-40db-fmam63005-p.aspx)

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TITLE 1.2 dB NF Input Protected Low Noise Amplifier, Operating From 900 MHz to 1.2 GHz with 40 dB Gain, 10 dBm P1dB and SMA		DWG NO FMAM63005		CAGE CODE 3FKR5	
CAD FILE	071916	SHEET	SCALE	N/A	SIZE A 2233