

Low Noise Amplifier, Operating From 50 MHz to 1,000 MHz with 19 dB Gain, 20 dBm Psat and SMA

SLNA-001-25-10-SMA is a low noise RF coaxial power amplifier operating in the 50 MHz to 1 GHz frequency range. The amplifier offers Noise Figure of 0.6 dB typ, 18 dBm min of P1dB and 19 dB typ of small signal gain. This exceptional technical performance is achieved through the use of hybrid MIC design and advanced GaAs E-pHEMT devices. The low noise amplifier requires an operating voltage between +5 VDC and +12VDC power supply. The connectorized SMA module is unconditionally stable and includes built-in voltage regulation, bias sequencing.

Electrical Specifications (TA = +25°C , DC Voltage = 12Vdc , DC Current = 90mA)

Description	Min	Typ	Max	Unit
Frequency Range	50		1,000	MHz
Small Signal Gain		19		dB
Saturated Output Power (Psat)		+20		dBm
Operating DC Voltage	5		12	Volts
Operating DC Current		90		mA
Operating Temperature Range	-40		+60	°C

RF Characteristic

Description	F1	F2	F3	Units
Frequency Range	0.05 to 0.5	0.5 to 1		GHz
Small Signal Gain	24	19		dB
Input Return Loss	10	13		dB
Output Return Loss	15	13		dB
Output at P1dB	18	20		dBm
Output 3rd Intercept Point	35	36		dBm
Noise Figure	0.6	0.5		dB

Mechanical Specifications

Size	
Length	1.38 in [35.05 mm]
Width	0.5 in [12.7 mm]
Height	1.2 in [30.48 mm]
Weight	0.1 lbs [45.36 g]
Input Connector	SMA Female
Output Connector	SMA Female

Environmental Specifications

Temperature	
Operating Range	-40 to +60 deg C



Features:

- 50 MHz to 1 GHz Frequency Range
- P1dB: 18 dBm typ
- Small Signal Gain: 19 dB typ
- Noise Figure: 0.6 dB typ
- GaAs E-pHEMT 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
- Military Radio
- Radar Systems
- Telecom Infrastructure
- Test Instrumentation
- Military & Space
- Communication Systems
- Wireless Communication (GSM,UMTS)
- Microwave Radio Systems
- Cellular Base Stations
- Low Noise Amplifier
- General Purpose Amplification
- General Purpose Wireless
- Wideband Gain Block
- IF Amplifier/RF Driver Amplifier
- RF Wideband Front Ends
- RF Pre-amplification
- RFID

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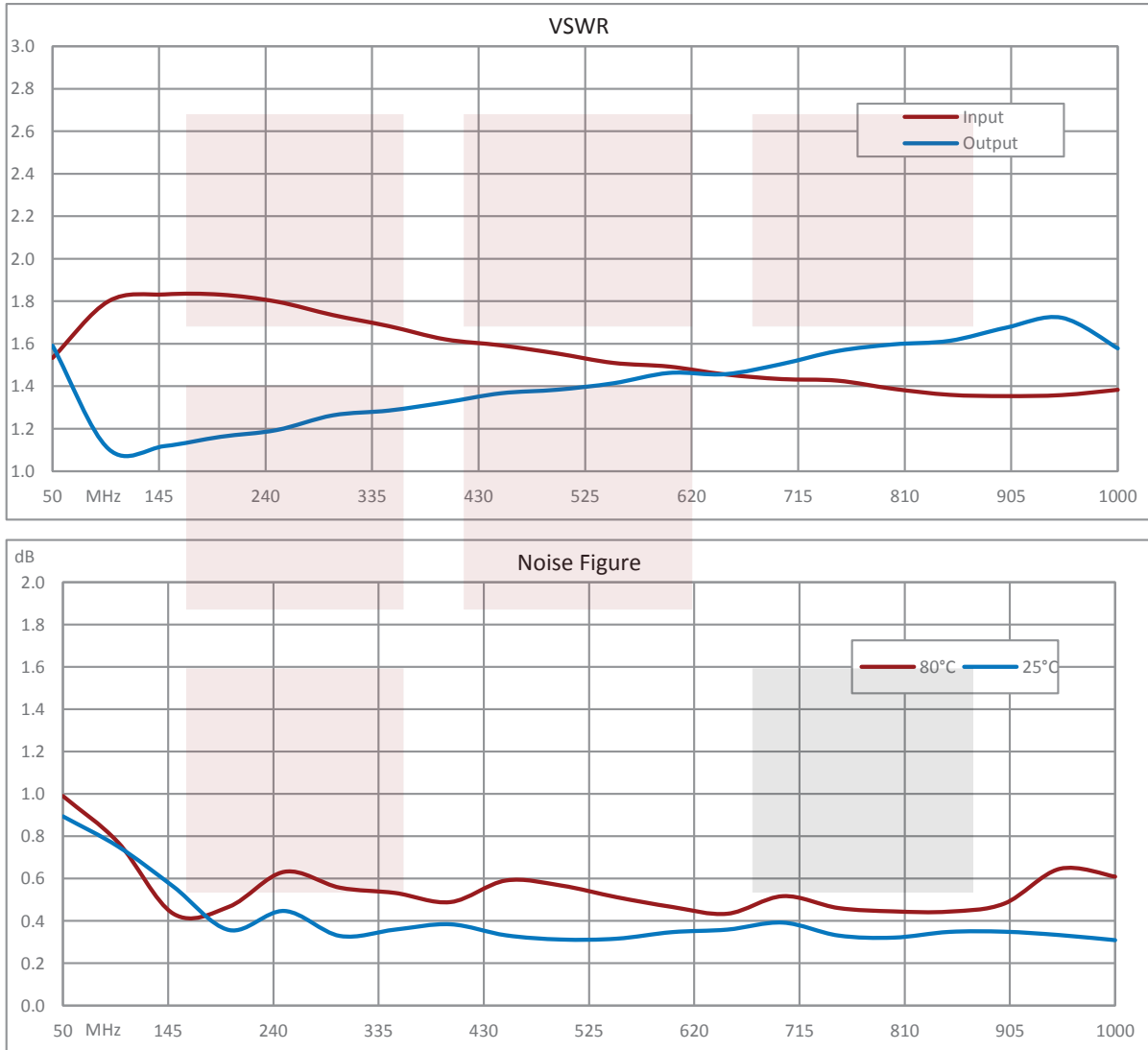
Compliance Certifications (see [product page](#) for current document)

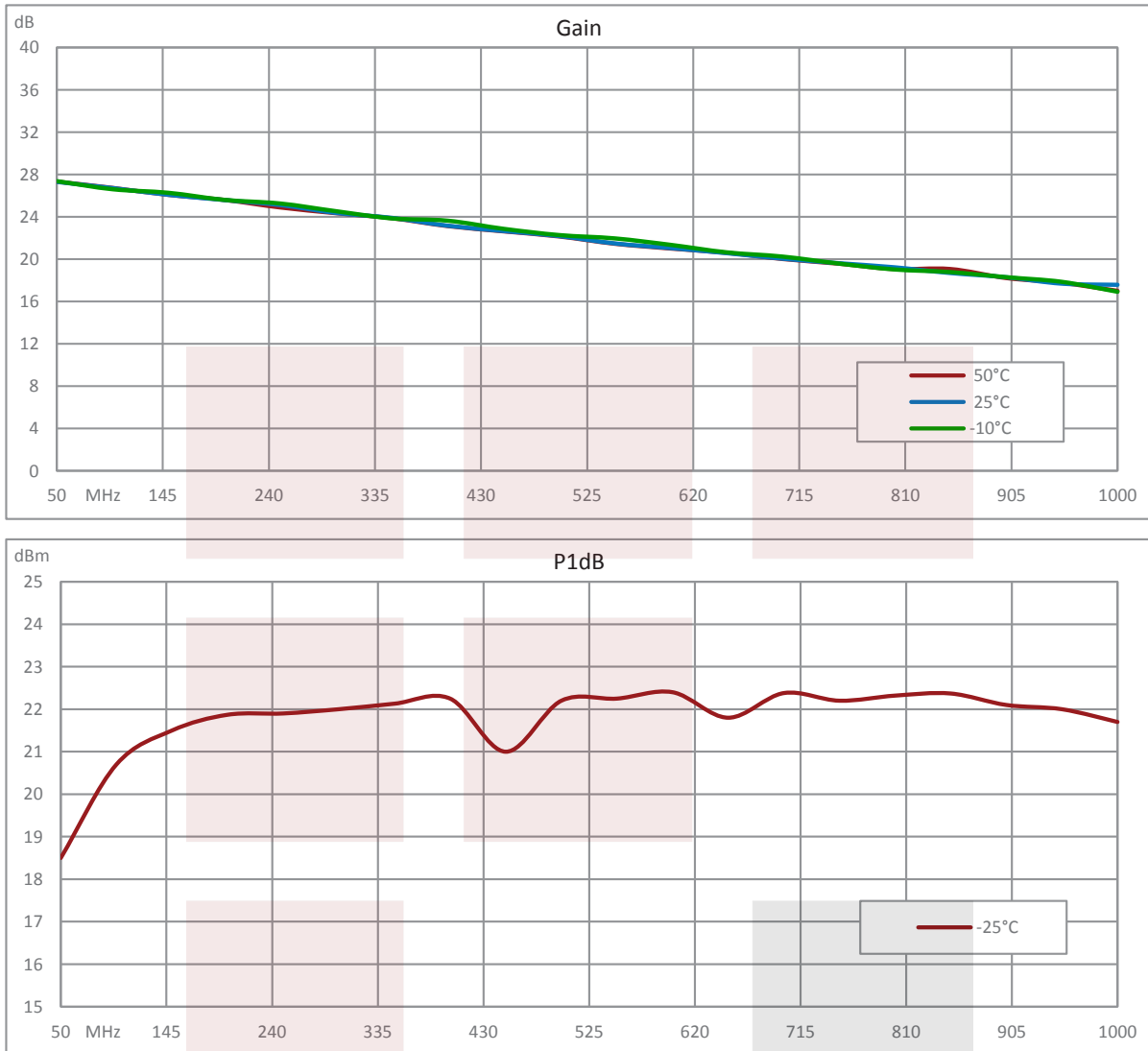
Plotted and Other Data

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



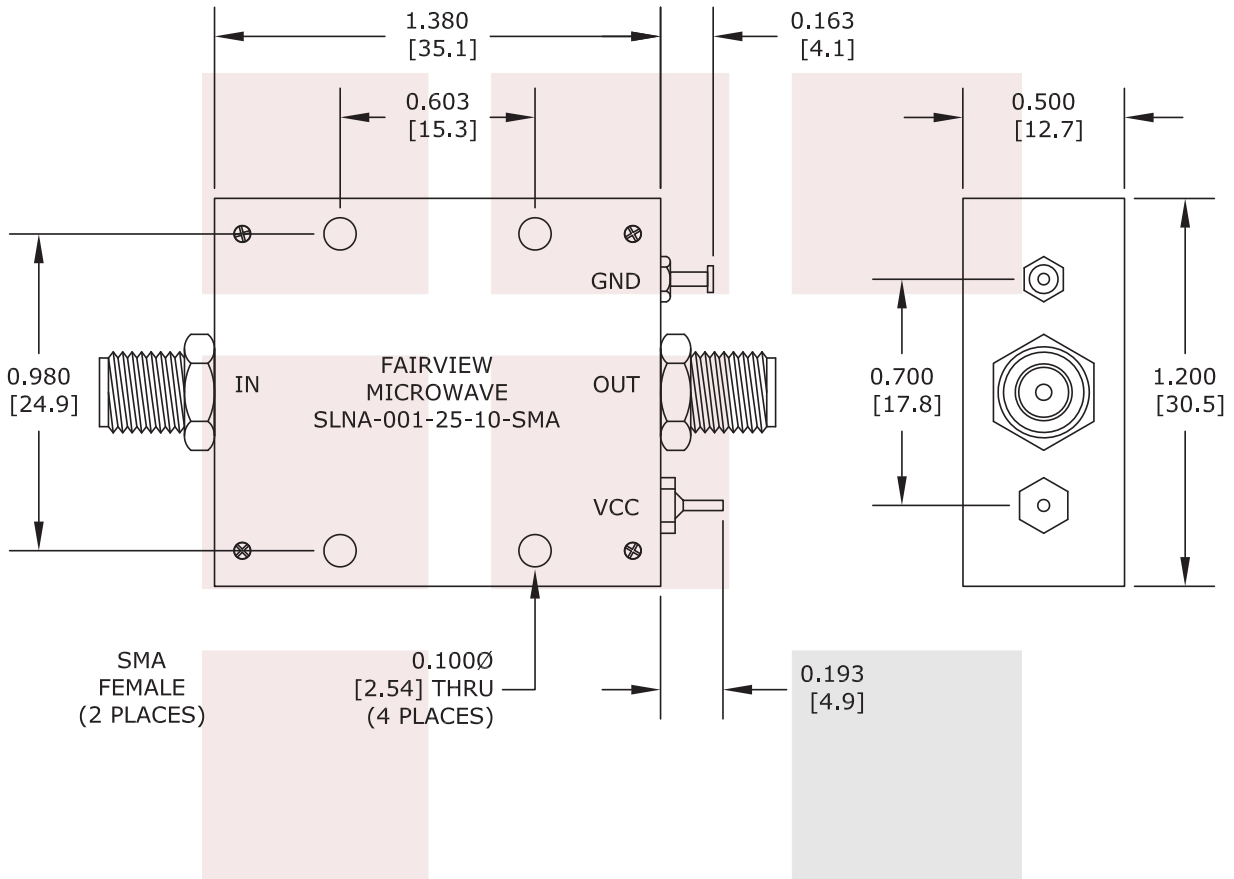


Low Noise Amplifier, Operating From 50 MHz to 1,000 MHz with 19 dB Gain, 20 dBm Psat and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Low Noise Amplifier, Operating From 50 MHz to 1,000 MHz with 19 dB Gain, 20 dBm Psat and SMA SLNA-001-25-10-SMA](https://www.fairviewmicrowave.com/low-noise-amplifier-slina-001-25-10-sma-p.aspx)

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TITLE Low Noise Amplifier, Operating From 50 MHz to 1,000 MHz with 19 dB Gain, 20 dBm Psat and SMA		DWG NO SLNA-001-25-10-SMA		CAGE CODE 3FKR5	
CAD FILE	032715	SHEET	SCALE	N/A	SIZE A 2233