

1.5 dB NF Low Noise Amplifier Operating From 1 GHz to 2 GHz with 35 dB Gain, 10 dBm Psat and SMA

SLNA-020-35-15-SMA is a L-band coaxial low noise amplifier operating in the 1 to 2 GHz frequency range. The amplifier offers 1.5 dB noise figure, 10 dBm minimum of saturated power and high 35 dB minimal small signal gain with gain flatness of ± 1.0 dB max. This technical performance is achieved through the use of hybrid MIC design and advanced GaAs PHEMT devices. The low noise amplifier requires typically a +12V DC power supply. The connectorized SMA module is unconditionally stable and includes built-in voltage regulation, bias sequencing, and reverse bias protection for added reliability. The amplifier operates over the temperature range of -40°C and +85°C.

Electrical Specifications (TA = +25°C , DC Voltage = 12Volts , DC Current = 200mA)

Description	Min	Typ	Max	Unit
Frequency Range	1		2	GHz
Small Signal Gain	35			dB
Gain Flatness			± 1	dB
Minimum Psat	+10			dBm
Noise Figure		1.5		dB
Input VSWR			2:1	
Output VSWR			2:1	
Operating DC Voltage	11	12	13	Volts
Operating DC Current			200	mA
Operating Temperature Range	-40		+85	°C

Absolute Maximum Rating

Parameter	Rating	Units
Source Voltage	+15	Volts
RF input Power	+17	dBm
Operating Temperature (base-plate)	-40 to +85	°C
Storage Temperature	-55 to +85	°C



ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in approved ESD Workstation.

Configuration

Connector 1 SMA Female
Connector 2 SMA Female

Compliance Certifications (visit www.FairviewMicrowave.com for current



Features:

- 1 GHz to 2 GHz Frequency Range
- Psat: 10 dBm min
- High Small Signal Gain: 35 dB
- Gain Flatness: ± 1.0 dB max
- Noise Figure: 1.5 dB
- 50 Ohm Input and Output Matched
- -40 to 85°C Operating Temperature
- Unconditionally Stable
- Regulated Supply & Bias Sequencing
- Hermetically Sealed Module
- Overvoltage External Protection for Easy Repair

Applications:

- Laboratory Applications
- R&D Labs
- Radar Systems
- Telecom Infrastructure
- Test Instrumentation
- Military & Space
- Communication Systems
- Satellite Communications
- Wireless Communications
- Microwave Radio Systems
- Low Noise Amplifier
- General Purpose Amplification
- Gain Block

Fairview Microwave
1130 Junction Dr. #100
Allen, TX 75013
Tel: 1-800-715-4396 / (972) 649-6678
Fax: (972) 649-6689
www.fairviewmicrowave.com
sales@fairviewmicrowave.com

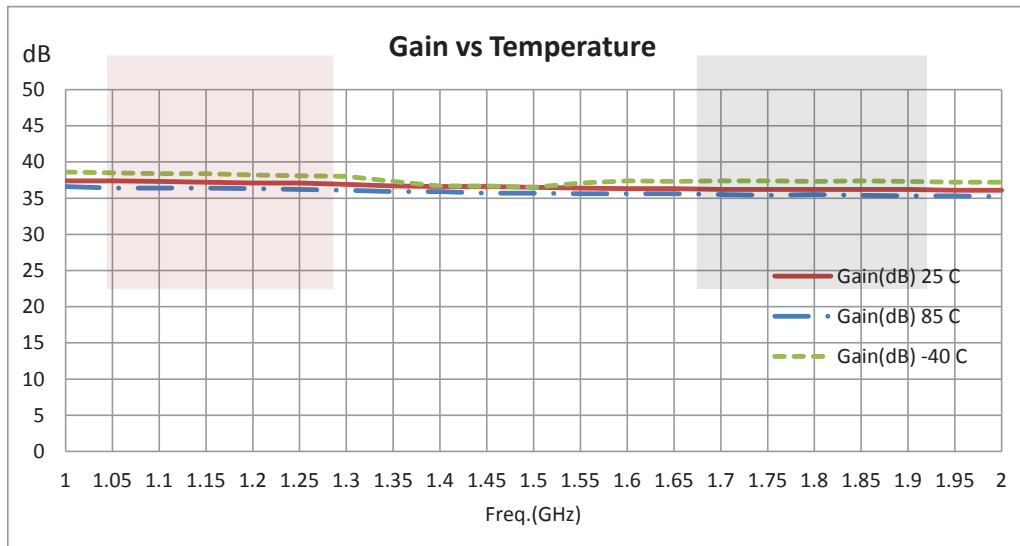
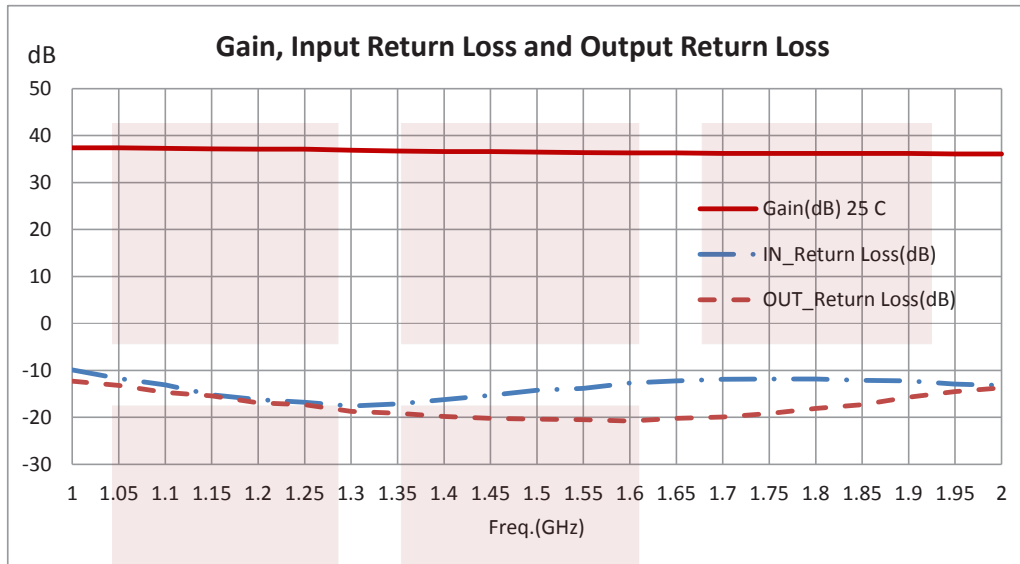
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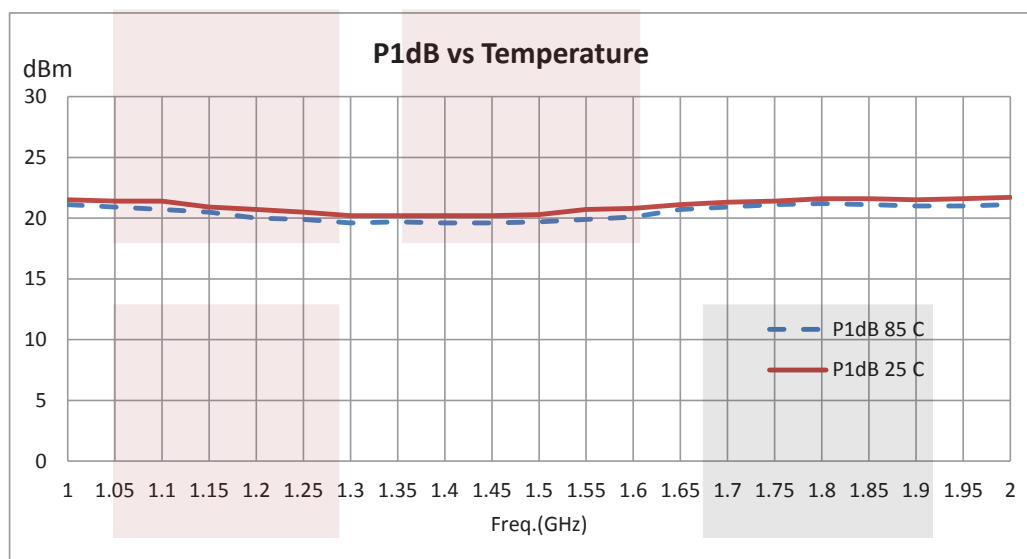
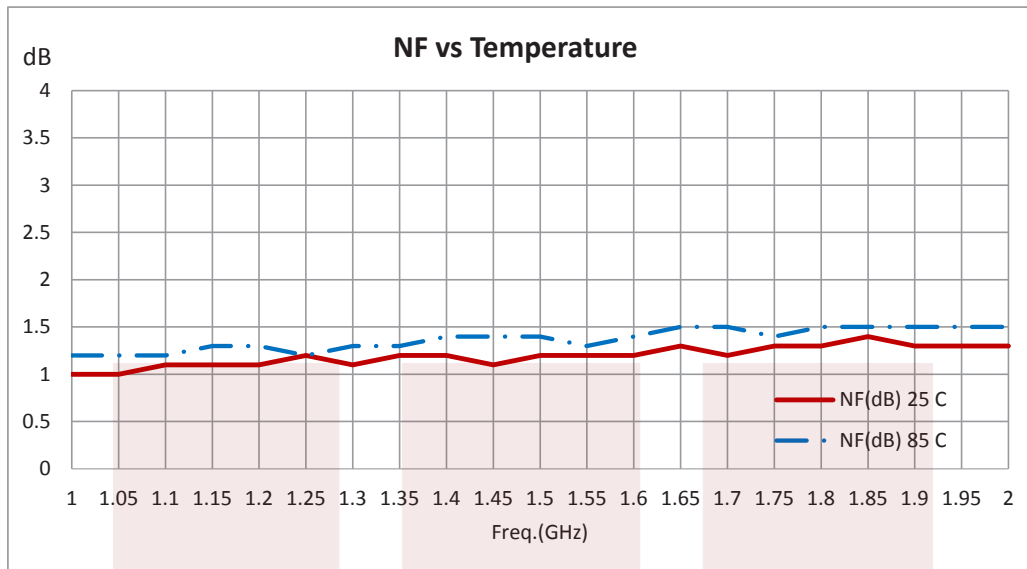
Plotted and Other Data

Notes:

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

Power Data



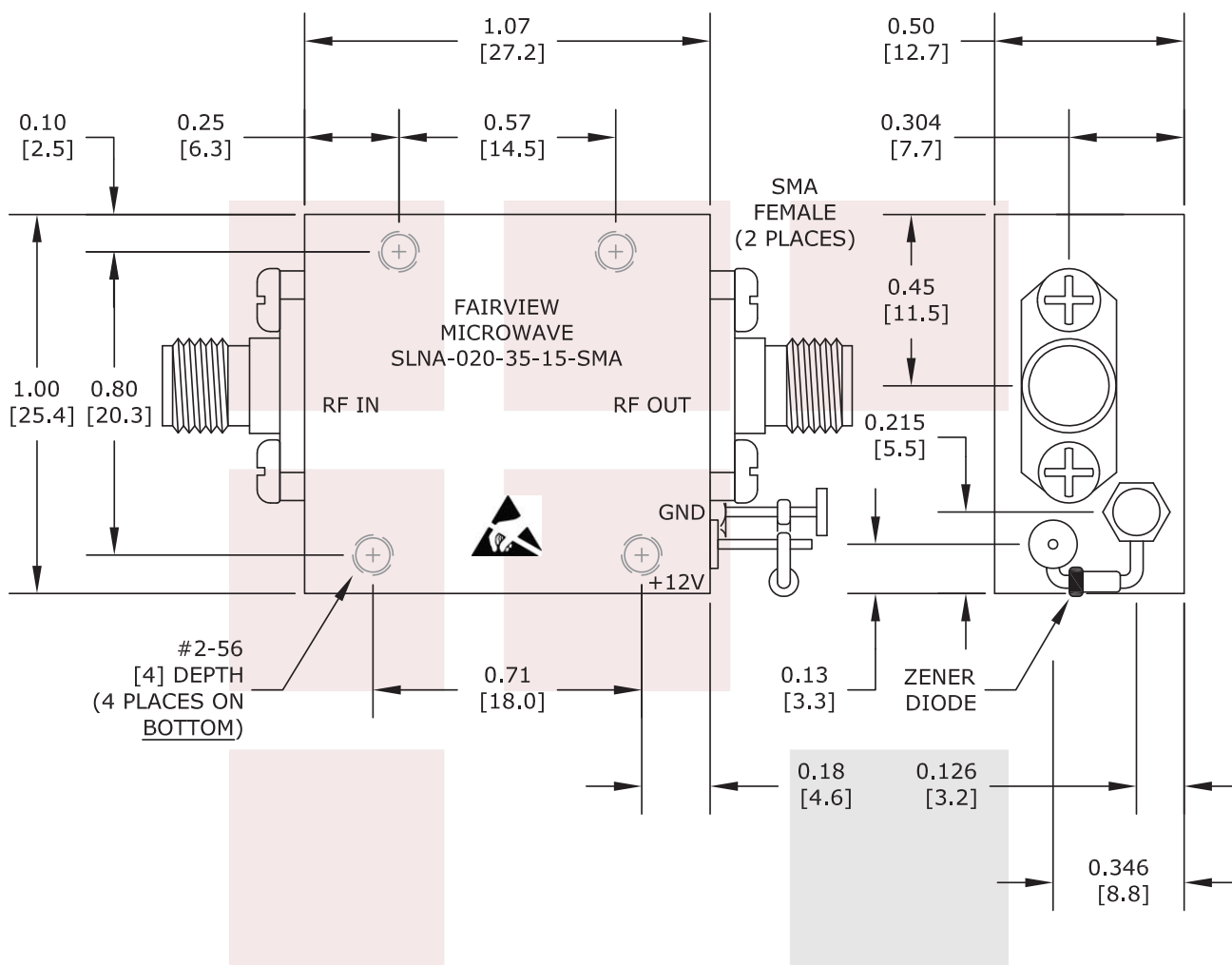


1.5 dB NF Low Noise Amplifier Operating From 1 GHz to 2 GHz with 35 dB Gain, 10 dBm Psat and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [1.5 dB NF Low Noise Amplifier Operating From 1 GHz to 2 GHz with 35 dB Gain, 10 dBm Psat and SMA SLNA-020-35-15-SMA](http://www.fairviewmicrowave.com/1.5db-nf-low-noise-amplifier-35db-slna-020-35-15-sma-p.aspx)

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FAIRVIEW MICROWAVE INC.

ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM

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

SLNA-020-35-15-SMA

CAGE CODE

3FKR5

CAD FILE

050914

SHEET

SCALE

N/A

SIZE

A

2233