

**2 dB NF Low Noise Amplifier Operating From 2 GHz to 4 GHz with 38 dB Gain, 13 dBm Psat and SMA**

SLNA-040-38-20-SMA is a S-band coaxial low noise amplifier operating in the 2 to 4 GHz frequency range. The amplifier offers 2 dB noise figure, 13 dBm minimum of saturated power and high 38 dB minimal small signal gain with the excellent gain flatness of  $\pm 1.0$  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	2		4	GHz
Small Signal Gain	38			dB
Gain Flatness			$\pm 1$	dB
Minimum Psat	+13			dBm
Noise Figure		2		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](http://www.FairviewMicrowave.com) for current



**Features:**

- 2 GHz to 4 GHz Frequency Range
- Psat: 13 dBm min
- High Small Signal Gain: 38 dB
- Gain Flatness:  $\pm 1.0$  dB max
- Noise Figure: 2 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
- Wireless Communications
- Satellite 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](http://www.fairviewmicrowave.com)  
[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

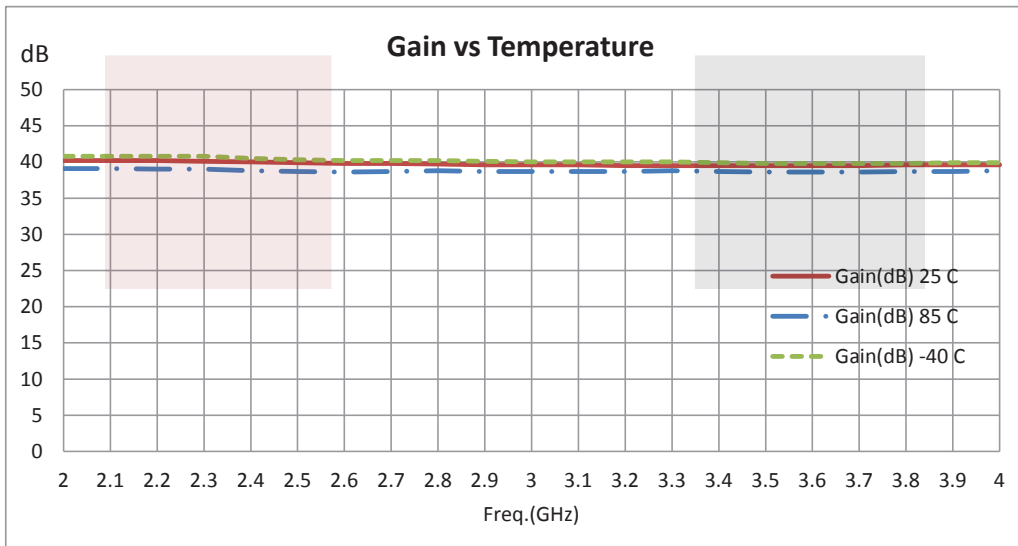
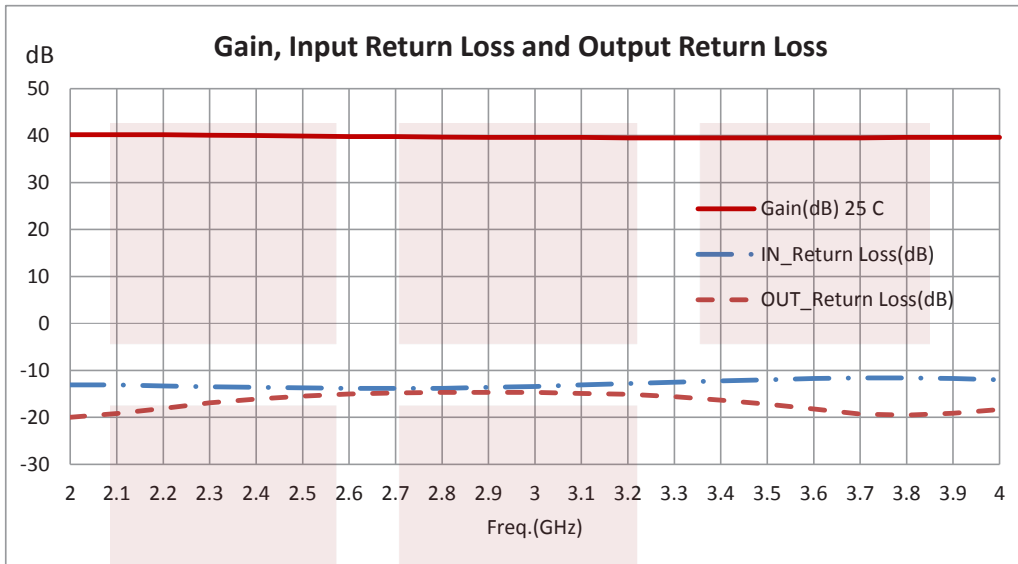
document)

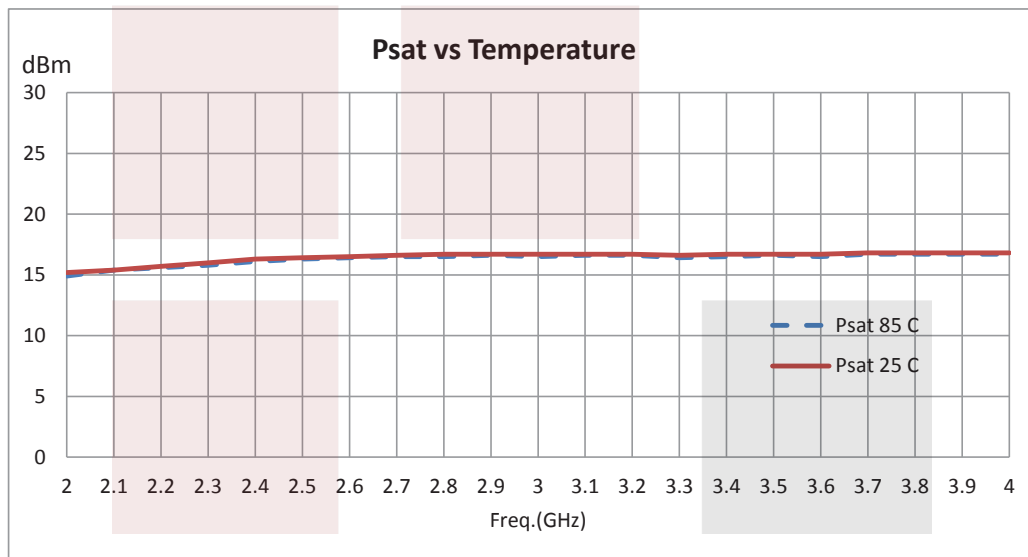
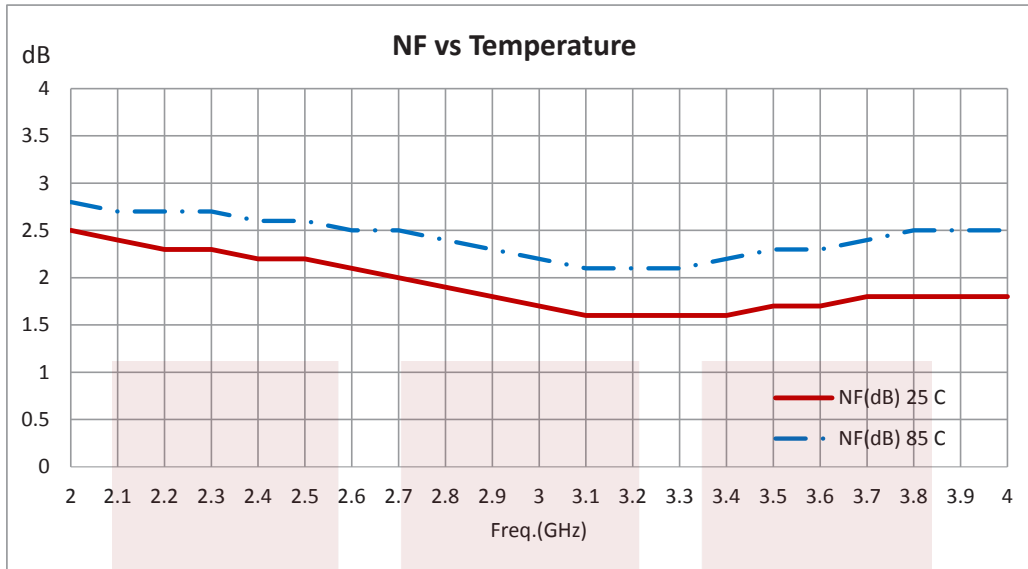
**Plotted and Other Data**

Notes:

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

**Power Data**



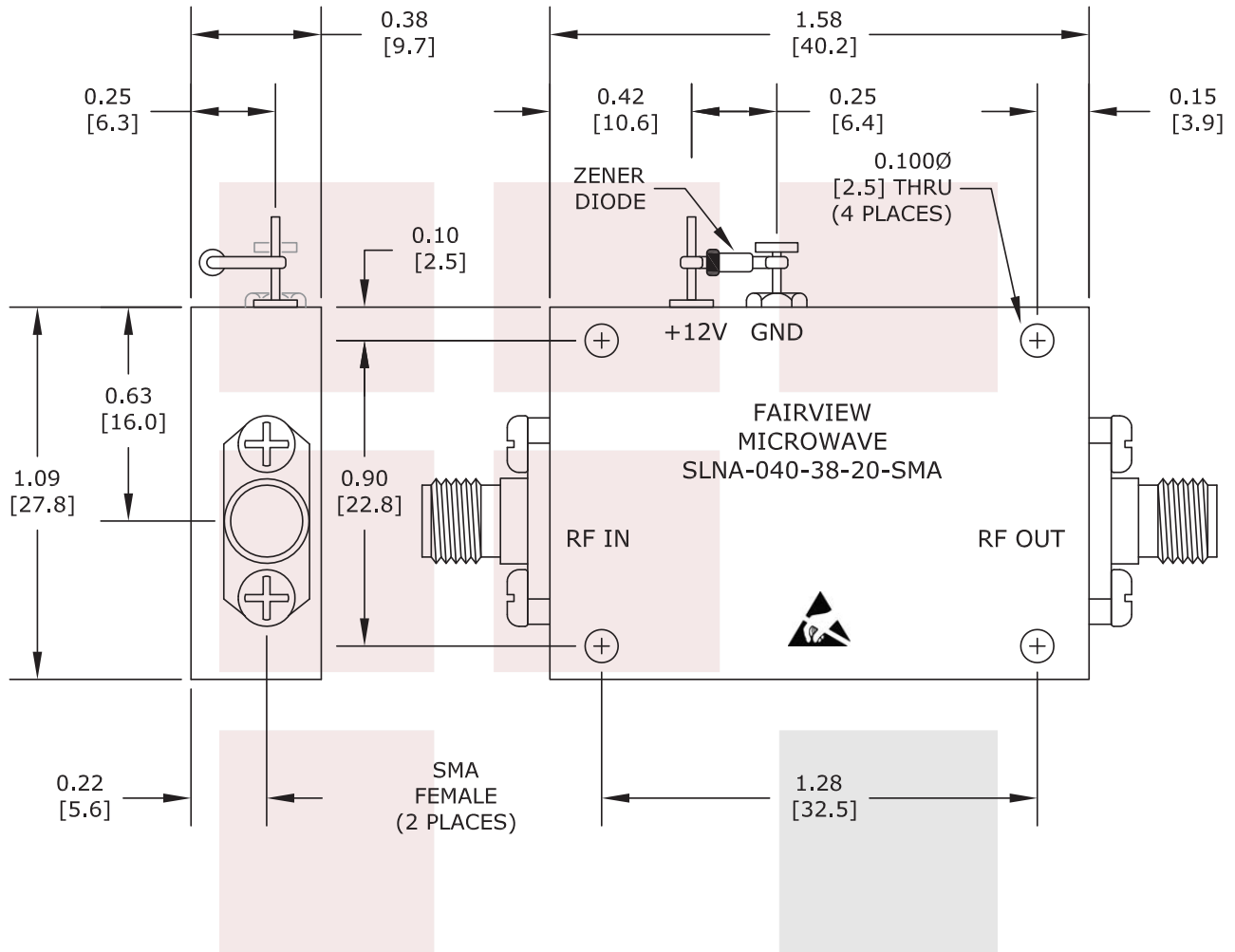


2 dB NF Low Noise Amplifier Operating From 2 GHz to 4 GHz with 38 dB Gain, 13 dBm Psat and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [2 dB NF Low Noise Amplifier Operating From 2 GHz to 4 GHz with 38 dB Gain, 13 dBm Psat and SMA SLNA-040-38-20-SMA](http://www.fairviewmicrowave.com/2db-nf-low-noise-amplifier-38db-slina-040-38-20-sma-p.aspx)

URL: <http://www.fairviewmicrowave.com/2db-nf-low-noise-amplifier-38db-slina-040-38-20-sma-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.



<b>FAIRVIEW MICROWAVE INC.</b> 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 2 dB NF Low Noise Amplifier Operating From 2 GHz to 4 GHz with 38 dB Gain, 13 dBm Psat and SMA		DWG NO SLNA-040-38-20-SMA	CAGE CODE 3FKR5		
CAD FILE	050914	SHEET	SCALE	N/A	SIZE A 2233