

**40 dB Gain 1.5 dB NF Low Noise High Gain Amplifier Operating From 1.2 GHz to 1.4 GHz with 15 dBm P1dB and SMA**

SLNA-014-40-35-SMA is an L-band high gain low noise coaxial amplifier operating in the 1.2 to 1.4 GHz frequency range. The low noise amplifier offers 15 dBm min of P1db and high 40 dB typical small signal gain with gain flatness of  $\pm 0.75$  dB typical. This excellent 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		1.4	GHz
Small Signal Gain	40			dB
Gain Flatness		$\pm 0.75$	$\pm 1$	dB
Gain Variance at OTR*			$\pm 1.8$	dB
Output at 1 dB Compression Point	+15			dBm
Noise Figure			1.5	dB
Input VSWR			2:1	
Output VSWR			2:1	
Operating DC Voltage	10.8	12	13.2	Volts
Operating DC Current		200	250	mA
Operating Temperature Range	-40		+85	°C

\*OTR= Base Plate Operating Temperature Range

**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  
Connector 2

SMA Female  
SMA Female

**Compliance Certifications** (visit [www.FairviewMicrowave.com](http://www.FairviewMicrowave.com) for current



**Features:**

- 1.2 GHz to 1.4 GHz Frequency Range
- P1dB: 15 dBm min
- Small Signal Gain: 40 dB min
- Gain Flatness:  $\pm 0.75$  dB typical
- Noise Figure: 1.5 dB max
- 50 Ohm Input and Output Matched
- Unconditionally Stable
- Regulated Supply & Bias Sequencing
- Hermetically Sealed Module
- Overvoltage External Protection for Easy Repair

**Applications:**

- L-band Military Radar
- Commercial Air Traffic Control
- Weather & Earth Observation Satellites
- Radar & Communication Systems
- High Gain Low Noise Amplifier

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)

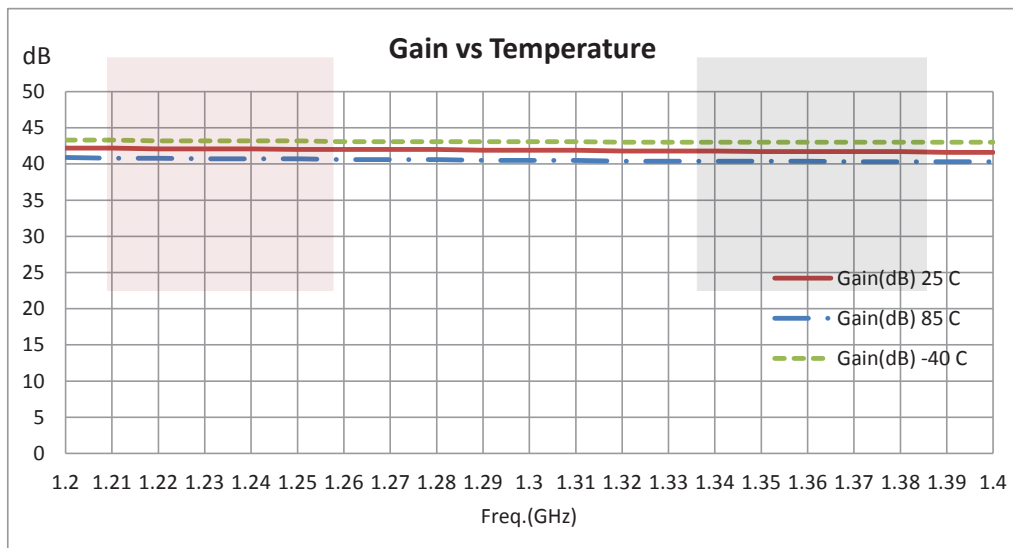
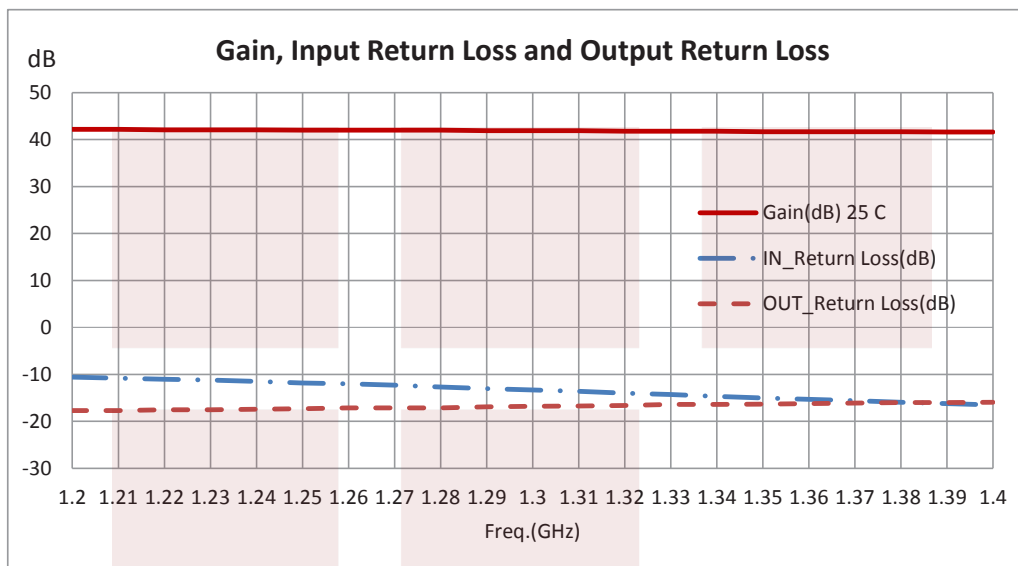
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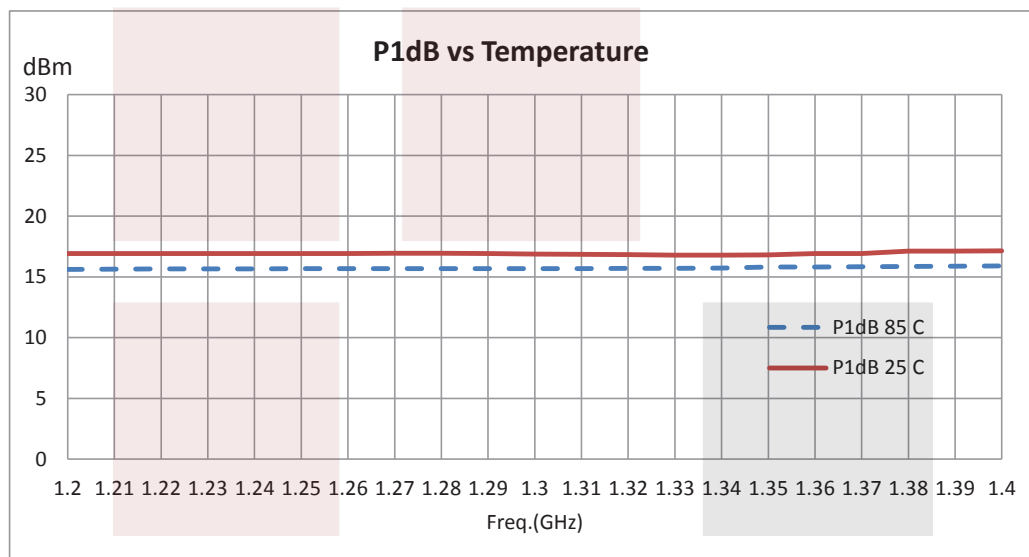
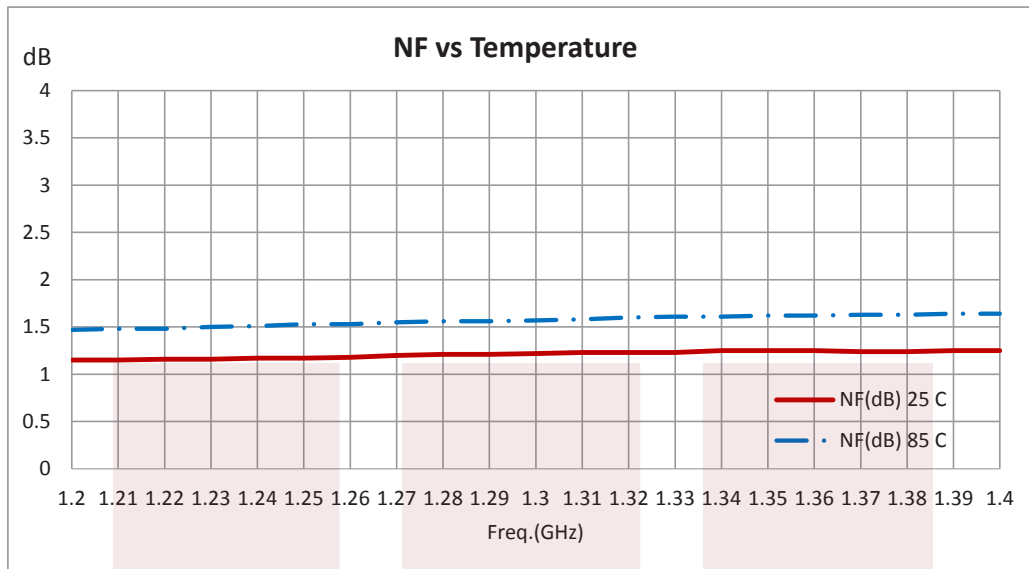
## Plotted and Other Data

Notes:

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

## Power Data



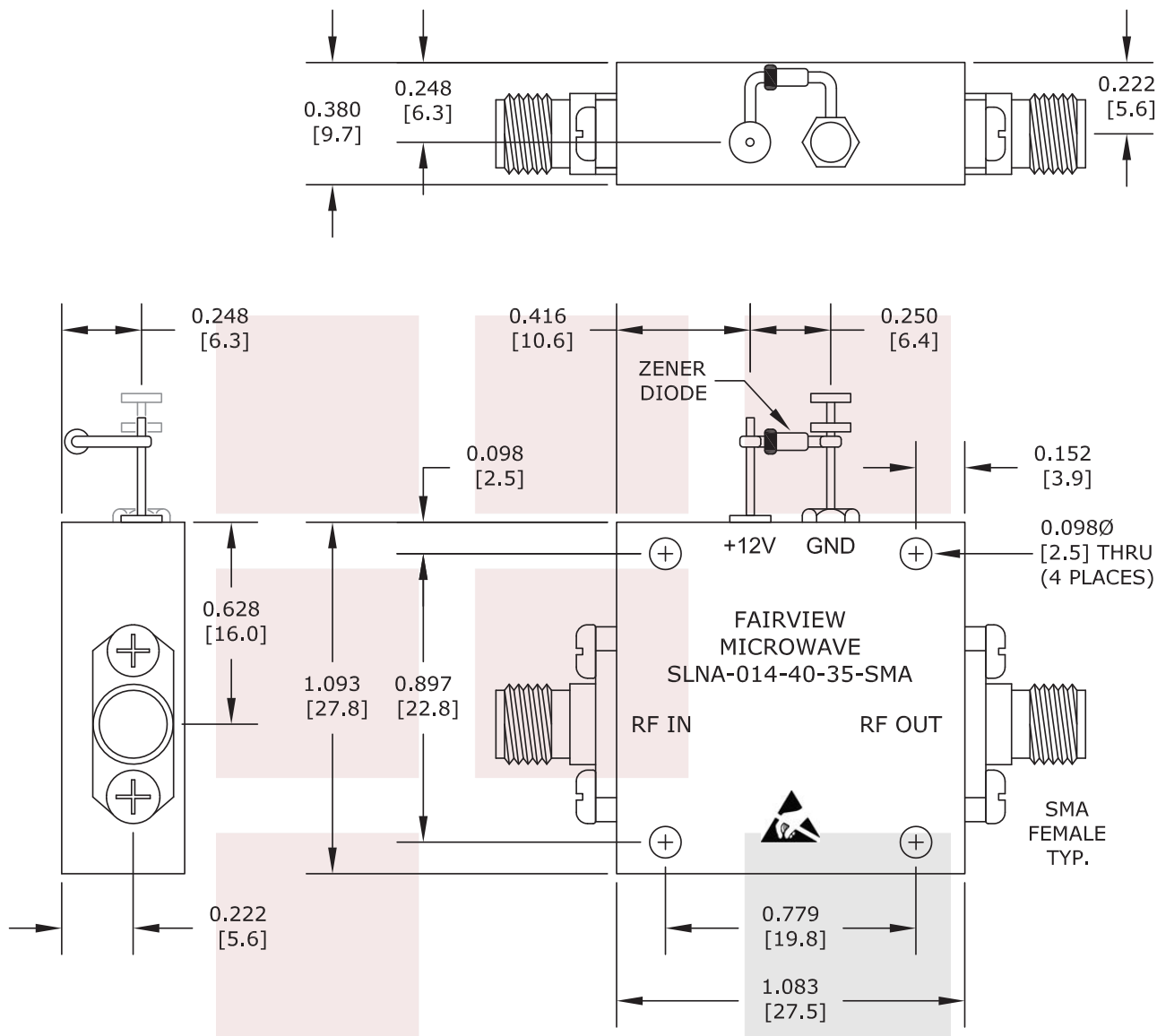


40 dB Gain 1.5 dB NF Low Noise High Gain Amplifier Operating From 1.2 GHz to 1.4 GHz with 15 dBm P1dB and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [40 dB Gain 1.5 dB NF Low Noise High Gain Amplifier Operating From 1.2 GHz to 1.4 GHz with 15 dBm P1dB and SMA SLNA-014-40-35-SMA](#)

URL: <http://www.fairviewmicrowave.com/40db-1.5db-nf-low-noise-high-gain-amplifier-slna-014-40-35-sma-p.aspx>

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TITLE 40 dB Gain 1.5 dB NF Low Noise High Gain Amplifier Operating From 1.2 GHz to 1.4 GHz with 15 dBm P1dB and SMA		DWG NO SLNA-014-40-35-SMA		CAGE CODE 3FKR5	
CAD FILE	050914	SHEET	SCALE	N/A	SIZE A 2233