

**3 dB NF Low Noise Amplifier Operating From 12 GHz to 18 GHz with 38 dB Gain, 13 dBm Psat and SMA**

SLNA-180-38-30-SMA is a Ku-band coaxial low noise amplifier operating in the 12 to 18 GHz frequency range. The amplifier offers 3 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 = 300mA)

Description	Min	Typ	Max	Unit
Frequency Range	12		18	GHz
Small Signal Gain	38			dB
Gain Flatness			$\pm 1$	dB
Minimum Psat	+13			dBm
Noise Figure		3		dB
Input VSWR			2:1	
Output VSWR			2:1	
Operating DC Voltage	11	12	13	Volts
Operating DC Current			300	mA
Operating Temperature Range	-40		+85	°C

**Absolute Maximum Rating**

Parameter	Rating	Units
Source Voltage	+18	Volts
RF input Power	+10	dBm
Operating Temperature (base-plate)	-55 to +85	°C
Storage Temperature	-40 to +125	°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:**

- 12 GHz to 18 GHz Frequency Range
- Psat: 13 dBm min
- High Small Signal Gain: 38 dB
- Gain Flatness:  $\pm 1.0$  dB max
- Noise Figure: 3 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
- Microwave Radio Systems
- Satellite Communications
- Low Noise Amplifier
- General Purpose Amplification
- Gain Block

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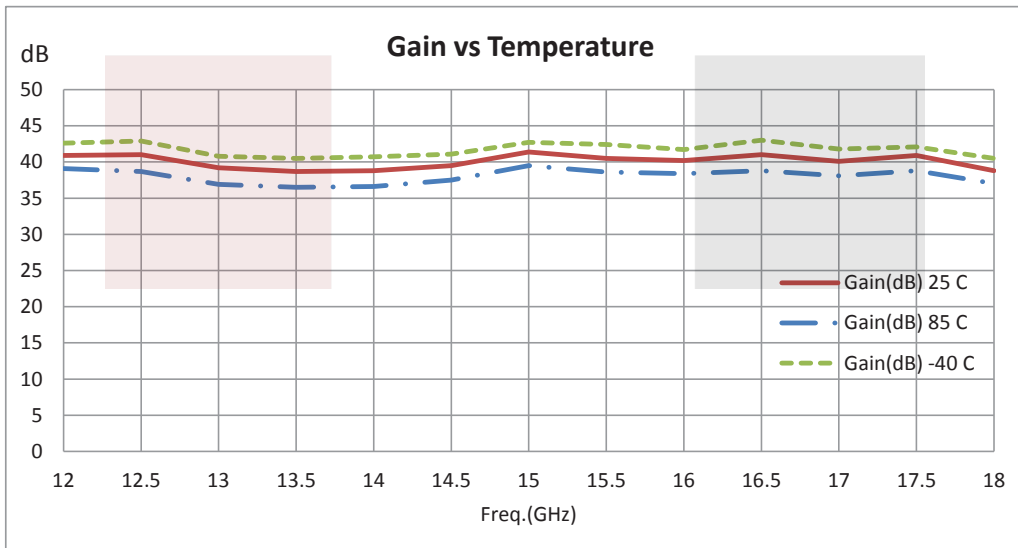
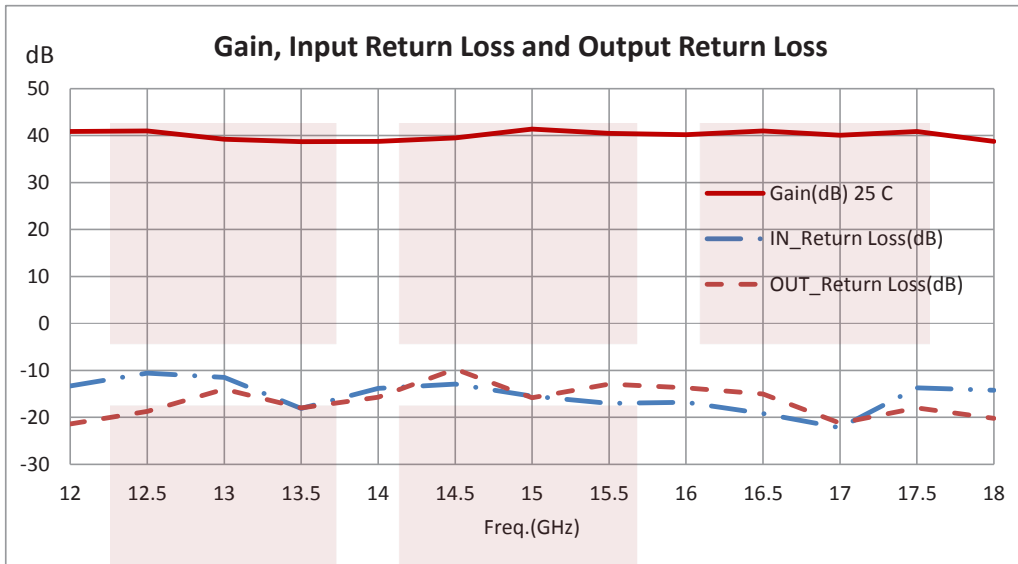
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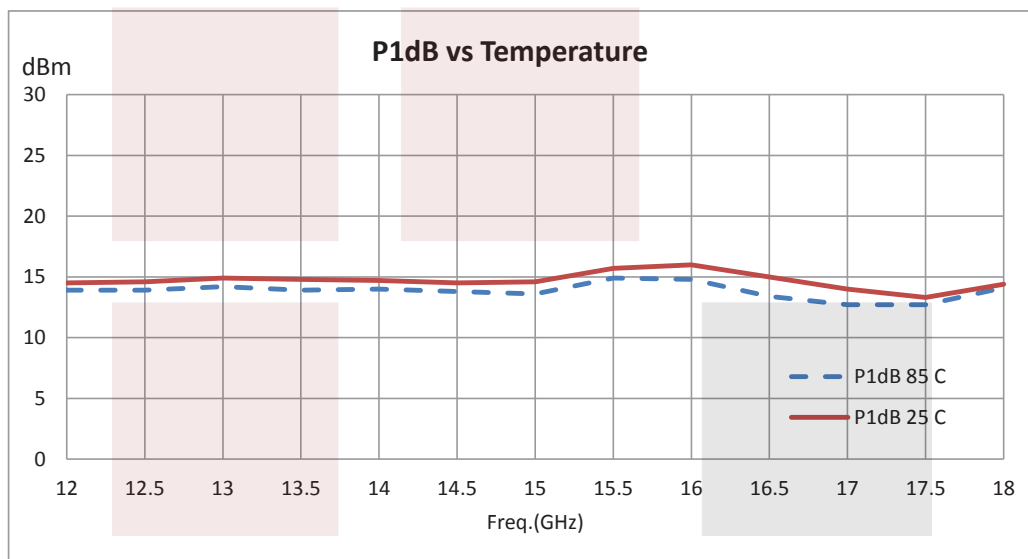
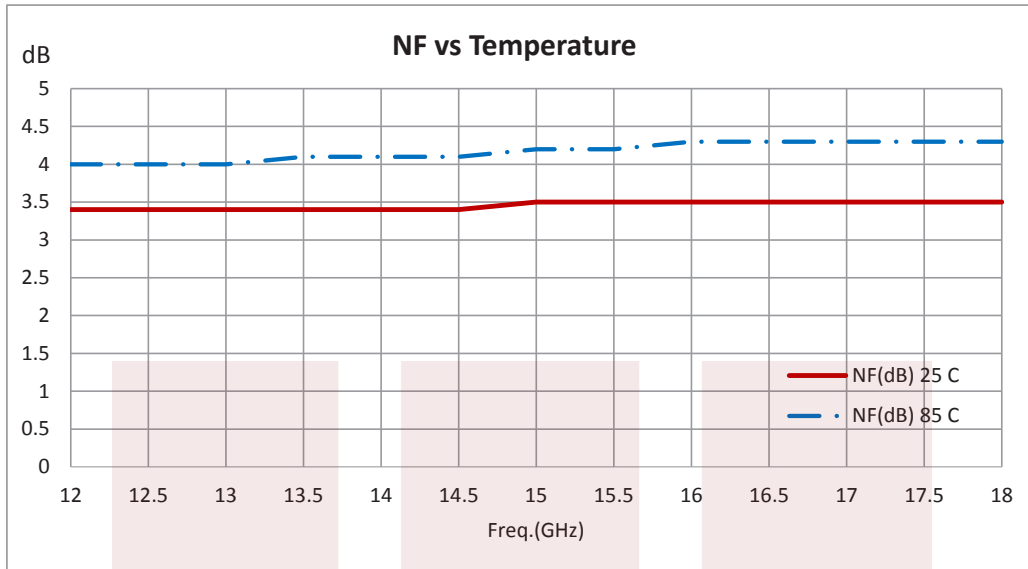
**Plotted and Other Data**

Notes:

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

**Power Data**



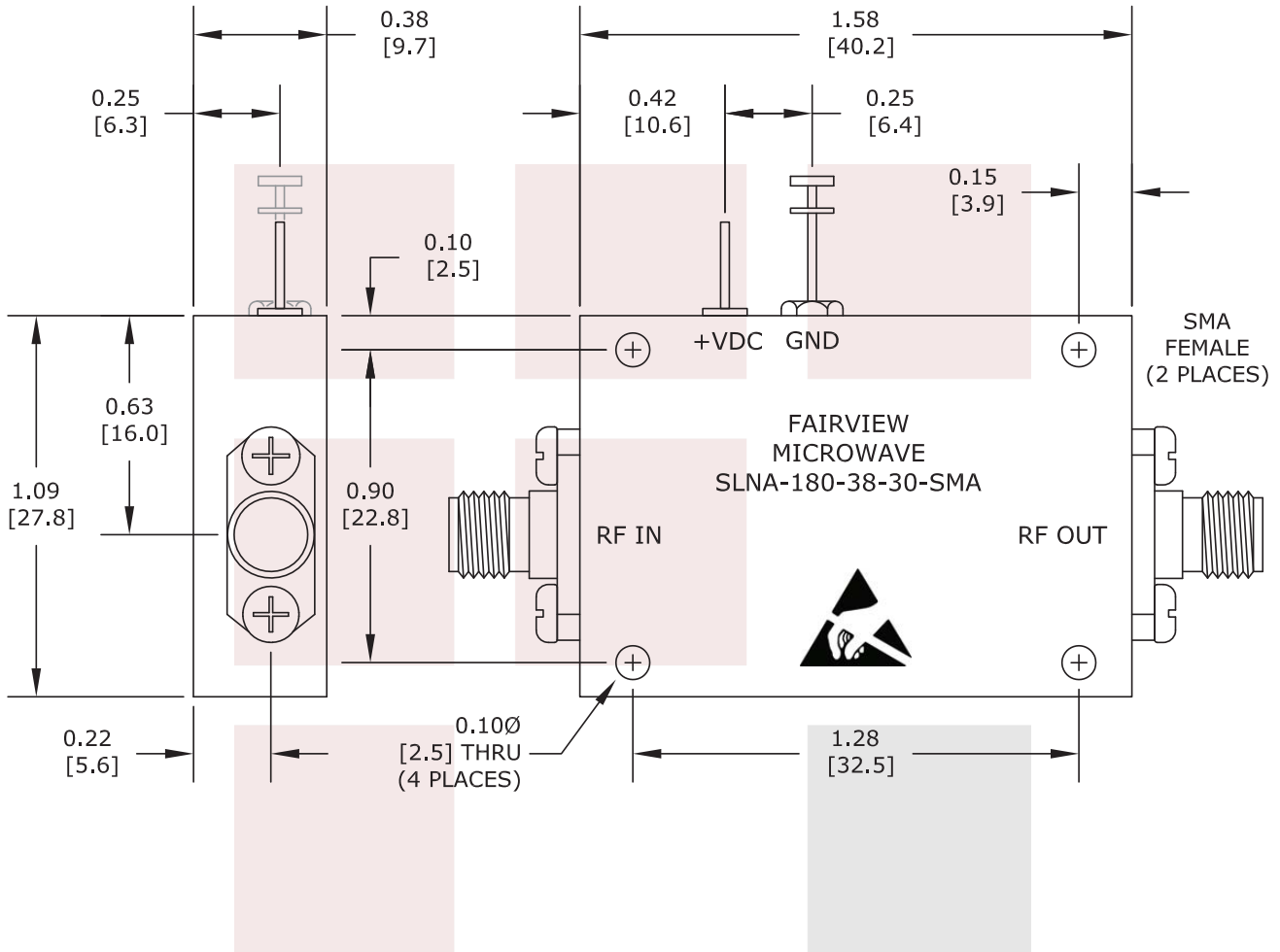


3 dB NF Low Noise Amplifier Operating From 12 GHz to 18 GHz with 38 dB Gain, 13 dBm Psat and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [3 dB NF Low Noise Amplifier Operating From 12 GHz to 18 GHz with 38 dB Gain, 13 dBm Psat and SMA SLNA-180-38-30-SMA](http://www.fairviewmicrowave.com/3db-nf-low-noise-amplifier-38db-slna-180-38-30-sma-p.aspx)

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TITLE 3 dB NF Low Noise Amplifier Operating From 12 GHz to 18 GHz with 38 dB Gain, 13 dBm Psat and SMA		DWG NO SLNA-180-38-30-SMA		CAGE CODE 3FKR5	
CAD FILE 050914 SHEET		SCALE N/A		SIZE A 2233	