Fairview Microwave
RF COMPONENTS ON DEMAND. Done!

SLNA-030-34-14-SMA DATA SHEET

1.4 dB NF Low Noise Amplifier Operating From 10 MHz to 3 GHz with 34 dB Gain, 11 dBm P1dB and SMA

SLNA-030-34-14-SMA is a wideband low noise RF coaxial power amplifier operating in the 10 MHz to 3 GHz frequency range. The amplifier offers 1.4 dB typical noise figure, 11 dBm of P1dB, 25 dBm of IP3 and 34 dB small signal gain with the excellent gain flatness of ±0.75dB max. This exceptional 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 = 95mA)

Description	Min	Typ	Max	Unit
Frequency Range	0.01		3	GHz
Small Signal Gain	32.5	34		dB
Gain Flatness		±0.75	±1	dB
Gain Variance at OTR*			±1.25	dB
Output at 1 dB Compression Point	+11	+11		dBm
Output 3rd Intercept Point		+25		dBm
Noise Figure (50 MHz to 3 GHz)		1.4	1.7	dB
Input VSWR		1.4:1	1.6:1	
Output VSWR		1.4:1	1.6:1	
Reverse Isolation	40	50		dB
Operating DC Voltage	10	12	15	Volts
Operating DC Current	85	95	105	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	+10	dBm
Operating Temperature (base-plate)	-40 to +85	°C
Storage Temperature	-55 to +125	°C

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

Features:

- 10 MHz to 3 GHz Frequency Range
- P1dB: 11 dBm
- Flat Small Signal Gain: 34 dB
- Gain Flatness: ±0.75 dB
- Gain Variance over OTR: ±1.25 dB
- Noise Figure: 1.4 dB typ
- IP3: +25dBm
- Reverse Isolation: 50 dB
- 50 Ohms Input and Output Matched
- -40 to 85°C Operating Temperature
- Unconditionally Stable
- Regulated Supply & Bias Sequencing
- Overvoltage Protection

Applications:

- Laboratory Applications
- R&D Labs
- Military Radio
- Radar Systems
- Telecom Infrastructure
- Test Instrumentation
- Military & Space
- Communication Systems
- Wireless Communication
- 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

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Mechanical Specifications

Size

Length	1.5 in [38.1 mm]
Width	0.85 in [21.59 mm]
Height	0.375 in [9.53 mm]
Weight	0.05 lbs [22.68 g]
Input Connector	SMA Female
Output Connector	SMA Female

Environmental Specifications

Temperature

Operating Range	-40 to +85 deg C
Storage Range	-55 to +125 deg C

Compliance Certifications (visit www.FairviewMicrowave.com for current document)

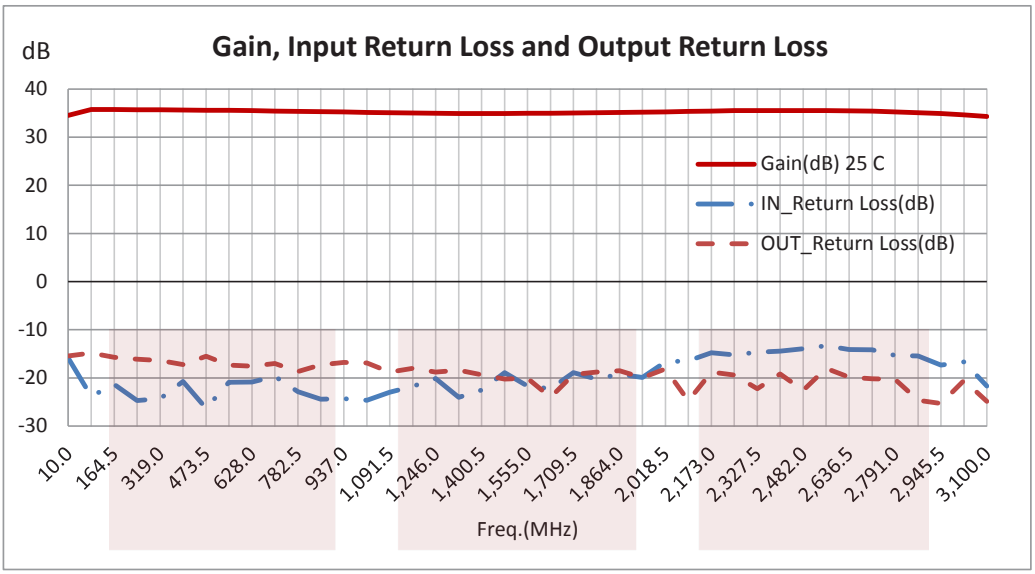
RoHS Compliant	Yes
REACH Compliant	12/17/2014

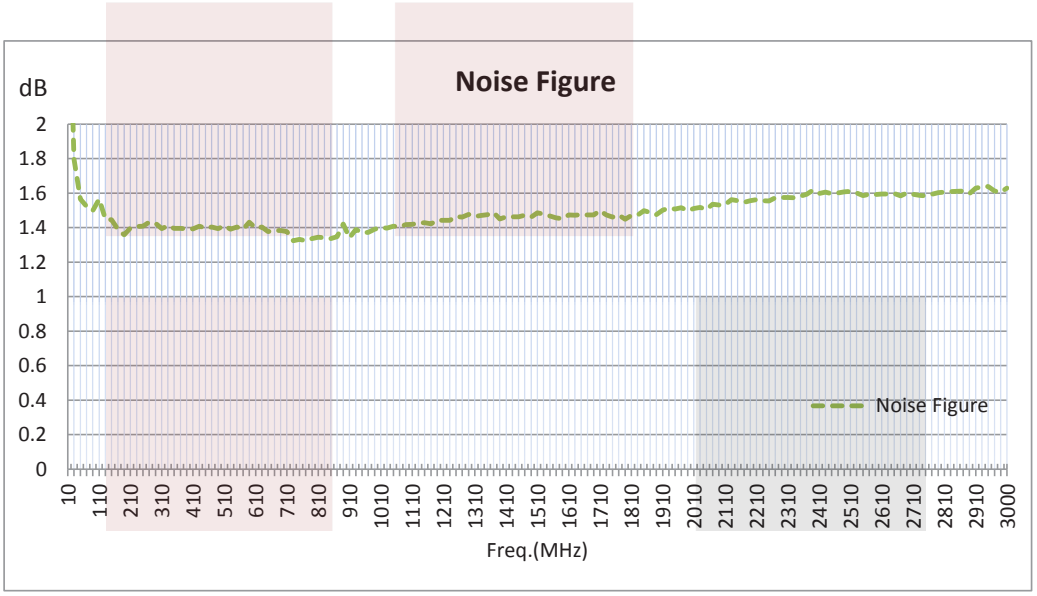
Plotted and Other Data

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

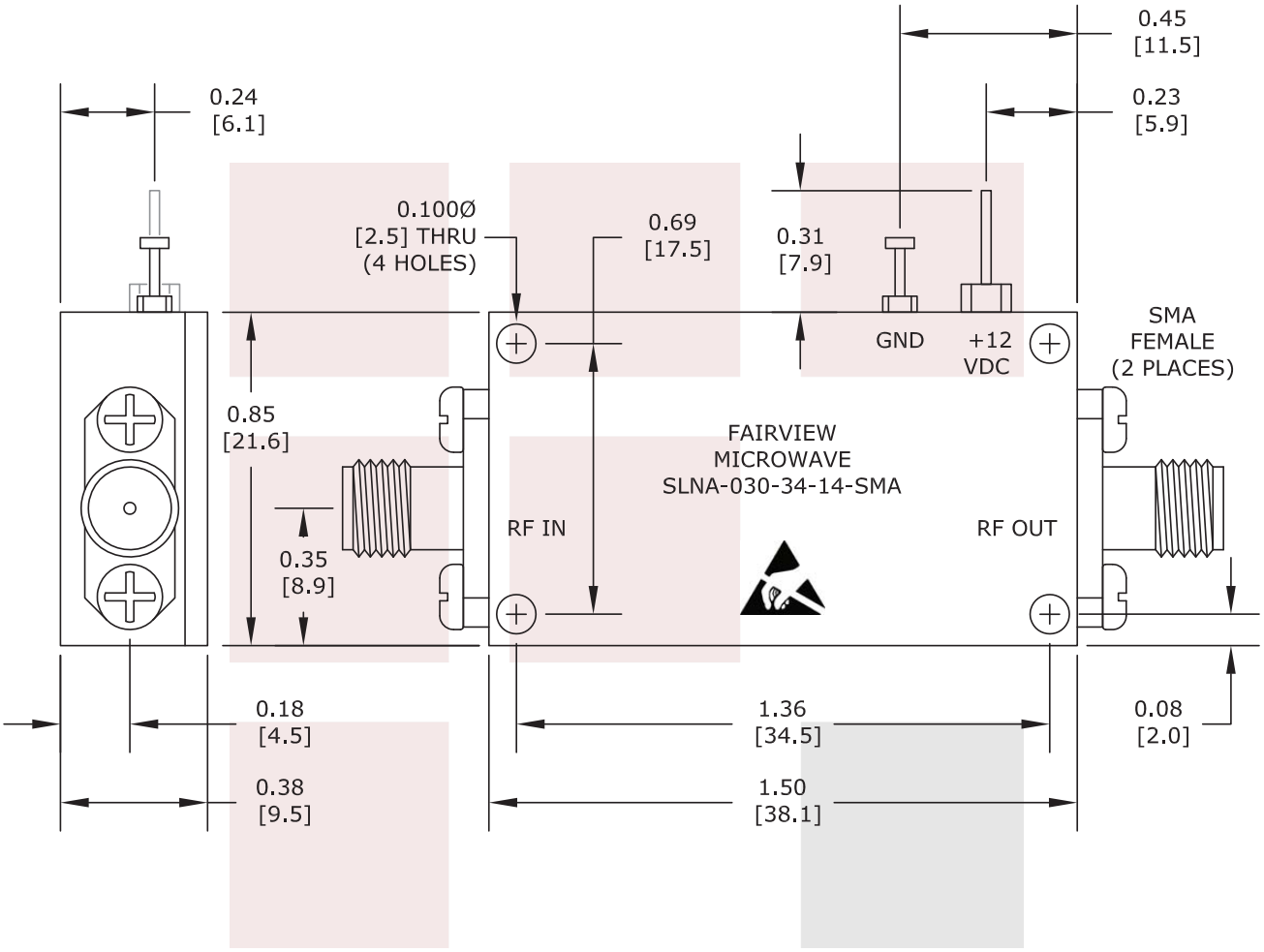




1.4 dB NF Low Noise Amplifier Operating From 10 MHz to 3 GHz with 34 dB Gain, 11 dBm P1dB and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: 1.4 dB NF Low Noise Amplifier Operating From 10 MHz to 3 GHz with 34 dB Gain, 11 dBm P1dB and SMA SLNA-030-34-14-SMA

URL: http://www.fairviewmicrowave.com/1.4db-nf-low-noise-amplifier-34db-slna-030-34-14-sma-p.aspx



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TITLE 1.4 dB NF Low Noise Amplifier Operating From 10 MHz to 3 GHz with 34 dB Gain, 11 dBm P1dB and SMA	DWG NO SLNA-030-34-14-SMA	CAGE CODE 3FKR5			
	CAD FILE 071414	SHEET	SCALE N/A	SIZE A	2233