

**0.8 dB NF Low Noise Amplifier Operating From
10 MHz to 1,000 MHz with 40 dB Gain, 18 dBm P1dB
and SMA**

SLNA-010-40-10-SMA is a wideband low noise RF coaxial power amplifier operating in the 10 MHz to 1 GHz frequency range. The amplifier offers 0.8 dB noise figure, 18 dBm of P1dB and 40 dB small signal gain with the excellent gain flatness of ± 1 dB. 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 = 110mA)

Description	Min	Typ	Max	Unit
Frequency Range	10		1,000	MHz
Small Signal Gain	37	40		dB
Gain Flatness		± 1	± 1.25	dB
Gain Variance at OTR*		1.25		dB
Output at 1 dB Compression Point	+16	+18		dBm
Noise Figure		0.8	1	dB
Input VSWR		1.45:1	1.65:1	
Output VSWR		1.3:1	1.5:1	
Reverse Isolation	50			dB
Operating DC Voltage	10	12	15	Volts
Operating DC Current	100	110	125	mA
Operating Temperature Range	-40		+85	°C

*OTR= Base Plate Operating Temperature Range

Absolute Maximum Rating

Configuration

Connector 1
Connector 2

SMA Female
SMA Female

Compliance Certifications (visit www.FairviewMicrowave.com for current



Features:

- 10 MHz to 1 GHz Frequency Range
- P1dB: 18 dBm
- Flat Small Signal Gain: 40 dB
- Gain Flatness: ± 1 dB
- Noise Figure: 0.8dB
- Reverse Isolation: 55 dB
- 50 Ohm 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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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.

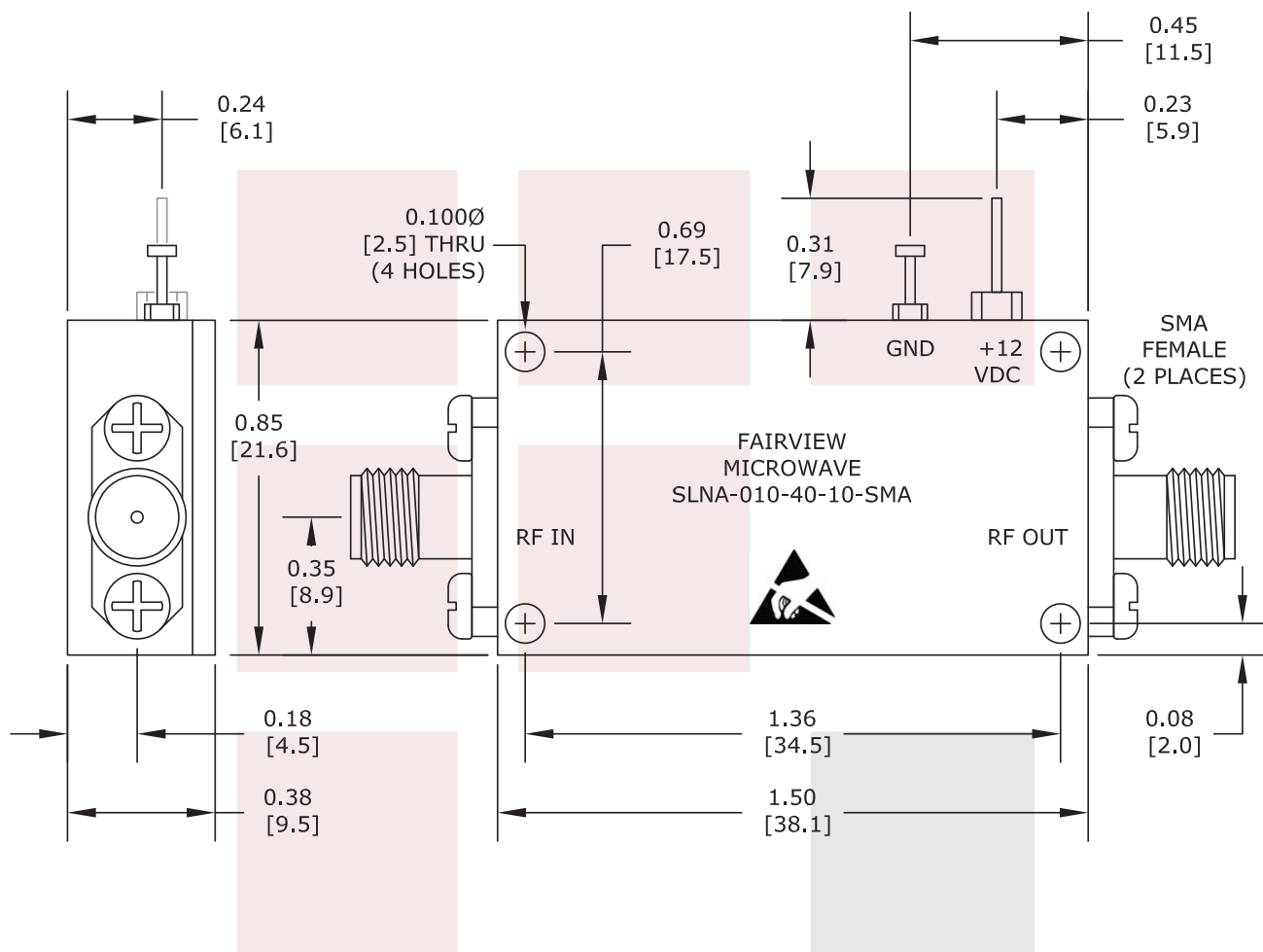
Power Data

0.8 dB NF Low Noise Amplifier Operating From 10 MHz to 1,000 MHz with 40 dB Gain, 18 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: [0.8 dB NF Low Noise Amplifier Operating From 10 MHz to 1,000 MHz with 40 dB Gain, 18 dBm P1dB and SMA SLNA-010-40-10-SMA](http://www.fairviewmicrowave.com/0.8db-nf-low-noise-amplifier-40db-slina-010-40-10-sma-p.aspx)

URL: <http://www.fairviewmicrowave.com/0.8db-nf-low-noise-amplifier-40db-slina-010-40-10-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.



NOTE:
HEAT SINK REQUIRED FOR PROPER OPERATION,
UNIT IS COOLED BY CONDUCTING TO HEAT SINK.

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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
0.8 dB NF Low Noise Amplifier Operating From 10 MHz
to 1,000 MHz with 40 dB Gain, 18 dBm P1dB and SMA

DWG NO SLNA-010-40-10-SMA **CAGE CODE** 3FKR5

CAD FILE 071414 **SHEET** **SCALE** N/A **SIZE** A **2233**