

2 dB NF, 18 GHz to 26.5 GHz, Low Noise Broadband Amplifier with 13 dBm, 40 dB Gain, 22 dBm IP3 and SMA

SLNA-265-40-25-SMA is a Broadband High Gain GaAs PHEMT MMIC-based coaxial Low Noise Amplifier, operating in the 18 to 26.5 GHz frequency range. The amplifier offers 2 dB Noise Figure, 13 dBm of P1dB and 40 dB small signal gain, with the gain flatness of ± 1.0 dB, along with 22 dBm of IP3 performance. This low noise amplifier requires only a single positive DC supply, unconditionally stable, operates over the temperature range of -40°C to 85°C , and characterized by a light weight (25 g) and small size (1.2"x1.0"x0.4").

Electrical Specifications (TA = $+25^{\circ}\text{C}$, DC Voltage = 12Volts, DC Current = 180mA)

Description	Min	Typ	Max	Unit
Frequency Range	18		26.5	GHz
Gain	38	40	43	dB
Gain Flatness		± 1	± 1.5	dB
Gain Variance at OTR*		± 1		dB
P1dB	+12	+13		dBm
IP3	+20	+22		dBm
Reverse Isolation	55	60		dB
Spurious		-60		dBc
Noise Figure		2	2.5	dB
Input VSWR		1.5:1	1.8:1	
Output VSWR		1.5:1	1.8:1	
Operating DC Voltage	10	12	15	Volts
Operating DC Current	150	180	220	mA
Operating Temperature Range (OTR)	-40		+85	$^{\circ}\text{C}$

*OTR= Base Plate Operating Temperature Range

Absolute Maximum Rating

Parameter	Rating	Units
Source Voltage	+18	Volts
RF input Power	-5	dBm
Operating Temperature (base-plate)	-40 to +85	$^{\circ}\text{C}$
Storage Temperature	-55 to +125	$^{\circ}\text{C}$



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



Features:

- 18 to 26.5 GHz Frequency Range
- Noise Figure: 2 dB typ
- Small Signal Gain: 40 dB
- Gain Flatness: ± 1.0 dB
- Gain Variation Over the Temperature Range: ± 1.5 dB
- P1dB: 13 dBm
- IP3: 22 dBm
- 50 Ohm Input and Output Matched
- -40 to $+85^{\circ}\text{C}$ Operating Temperature
- Unconditionally Stable
- Single DC Positive Supply
- Built-in DC Voltage Regulator
- Small Size & Light Weight

Applications:

- Laboratory Applications
- R&D Labs
- Electronic Warfare
- Telecom Infrastructure
- Test Instrumentation
- Military & Space
- Communication Systems
- Satellite Communications
- Wireless Communications
- Unmanned Systems
- Microwave Radio Systems
- Low Noise Amplifier
- General Purpose Amplification
- RF Front Ends

Fairview Microwave
1130 Junction Dr. #100
Allen, TX 75013
Tel: 1-800-715-4396 / (972) 649-6678
Fax: (972) 649-6689
www.fairviewmicrowave.com
sales@fairviewmicrowave.com

Configuration

- Connector 1 SMA Female
- Connector 2 SMA Female

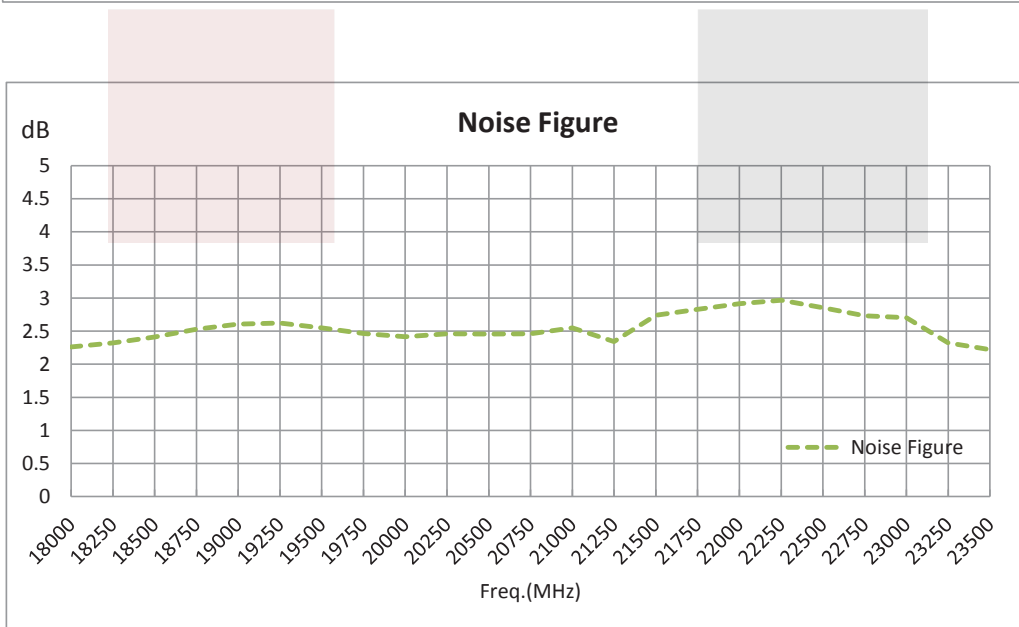
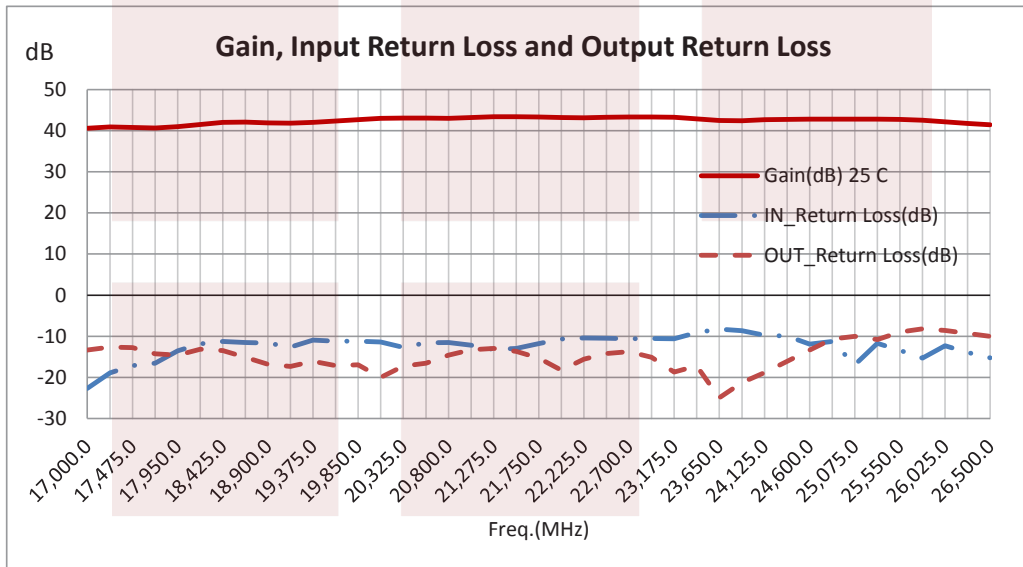
Compliance Certifications (visit www.FairviewMicrowave.com for current document)

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



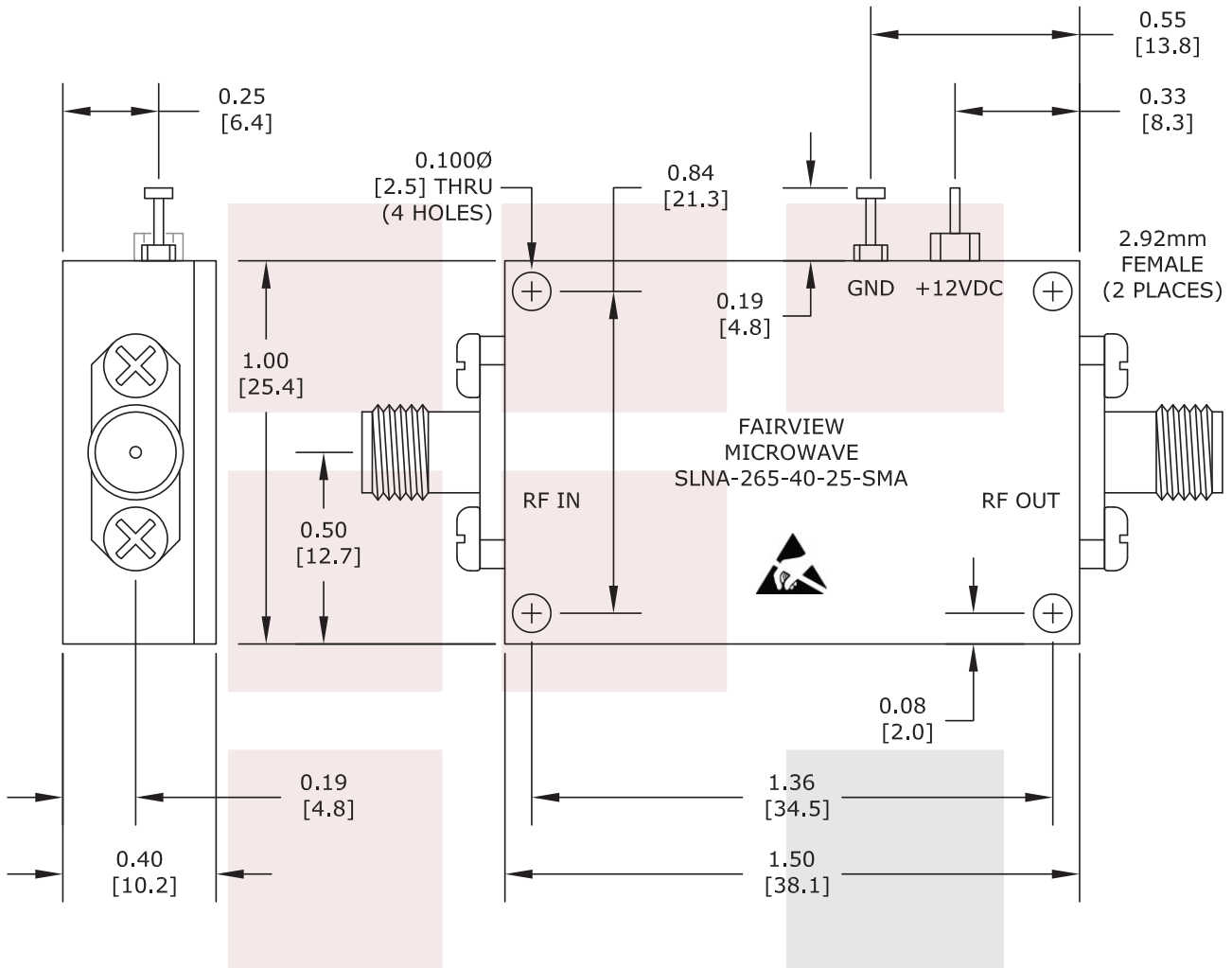
2 dB NF, 18 GHz to 26.5 GHz, Low Noise Broadband Amplifier with 13 dBm, 40 dB Gain, 22 dBm IP3 and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [2 dB NF, 18 GHz to 26.5 GHz, Low Noise Broadband Amplifier with 13 dBm, 40 dB Gain, 22 dBm IP3 and SMA SLNA-265-40-25-SMA](#)

URL: <http://www.fairviewmicrowave.com/18-26.5-ghz-low-noise-broadband-amplifier-slna-265-40-25-sma-p.aspx>

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

FAIRVIEW MICROWAVE INC. 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, 18 GHz to 26.5 GHz, Low Noise Broadband Amplifier with 13 dBm, 40 dB Gain, 22 dBm IP3 and SMA		DWG NO SLNA-265-40-25-SMA		CAGE CODE 3FKR5	
CAD FILE	071414	SHEET	SCALE	N/A	SIZE A 2233