

**40 dB Gain 1.1 dB NF Low Noise High Gain Amplifier  
 Operating From 3.1 GHz to 3.5 GHz with 15 dBm and  
 SMA**

SLNA-035-40-11-SMA is a S-band high gain low noise coaxial amplifier operating in the 3.1 to 3.5 GHz frequency range. The amplifier offers 15 dBm of P1dB and high 40 dB typical small signal gain with the gain typical flatness of  $\pm 0.3$  dB. 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 +15V 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 -30°C and +60°C.

**Electrical Specifications** (TA = +25°C , DC Voltage = 15Volts , DC Current = 150mA)

| Description                      | Min | Typ       | Max       | Unit  |
|----------------------------------|-----|-----------|-----------|-------|
| Frequency Range                  | 3.1 |           | 3.5       | GHz   |
| Small Signal Gain                |     | 40        |           | dB    |
| Gain Flatness                    |     | $\pm 0.3$ | $\pm 0.5$ | dB    |
| Output at 1 dB Compression Point | +15 | +15       |           | dBm   |
| Noise Figure                     |     | 1.1       | 1.2       | dB    |
| Input VSWR                       |     | 1.5:1     | 1.7:1     |       |
| Output VSWR                      |     | 1.5:1     | 1.7:1     |       |
| Operating DC Voltage             | 10  | 15        | 17        | Volts |
| Operating DC Current             |     | 150       | 170       | mA    |
| Operating Temperature Range      | -30 |           | +60       | °C    |

**Absolute Maximum Rating**

| Parameter                          | Rating     | Units |
|------------------------------------|------------|-------|
| Source Voltage                     | +15        | Volts |
| RF input Power                     | +17        | dBm   |
| Operating Temperature (base-plate) | -30 to +60 | °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 SMA Female  
 Connector 2 SMA Female

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

RoHS Compliant Yes



**Features:**

- 3.1 GHz to 3.5 GHz Frequency Range
- P1dB 15 dBm
- Small Signal Gain: 40 dB
- Gain Flatness:  $\pm 0.3$  dB
- Noise Figure: 1.1 dB
- 50 Ohm Input and Output Matched
- Unconditionally Stable
- Regulated Supply & Bias Sequencing
- Hermetically Sealed Module
- Overvoltage External Protection for Easy Repair

**Applications:**

- 3.1 GHz to 3.5 GHz Frequency Range
- P1dB 15 dBm
- Small Signal Gain: 40 dB
- Gain Flatness:  $\pm 0.3$  dB
- Noise Figure: 1.1 dB
- 50 Ohm Input and Output Matched
- Unconditionally Stable
- Regulated Supply & Bias Sequencing
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- Overvoltage External Protection for Easy Repair

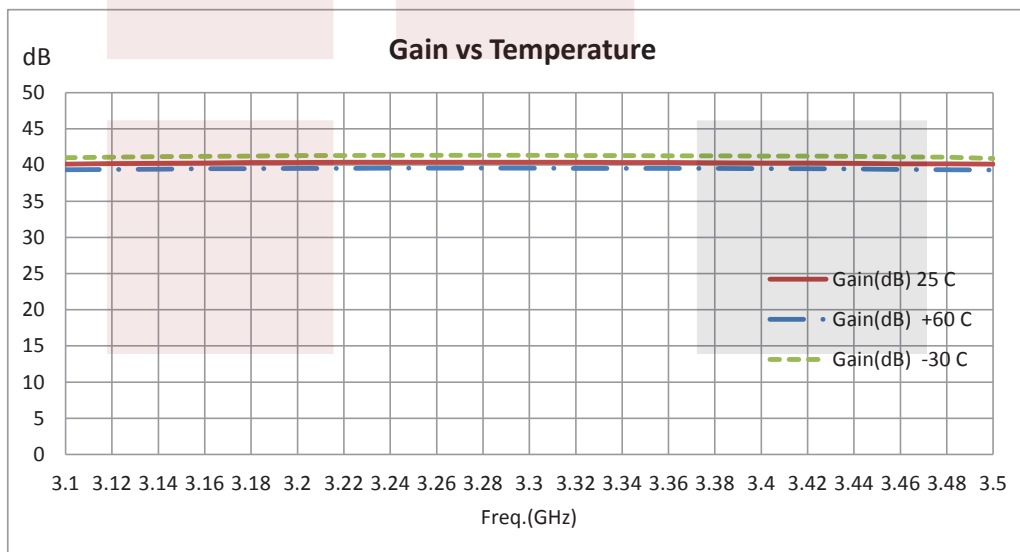
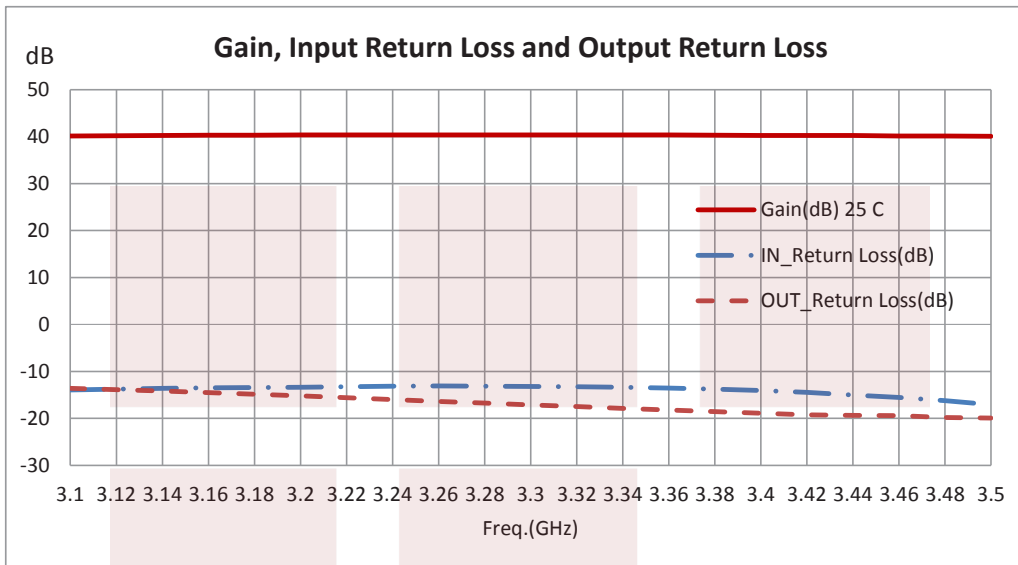
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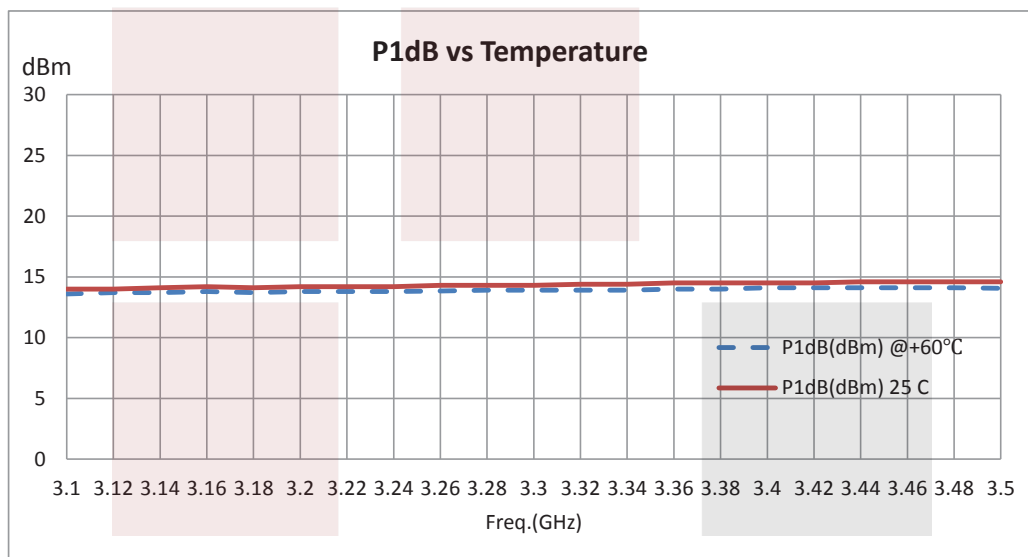
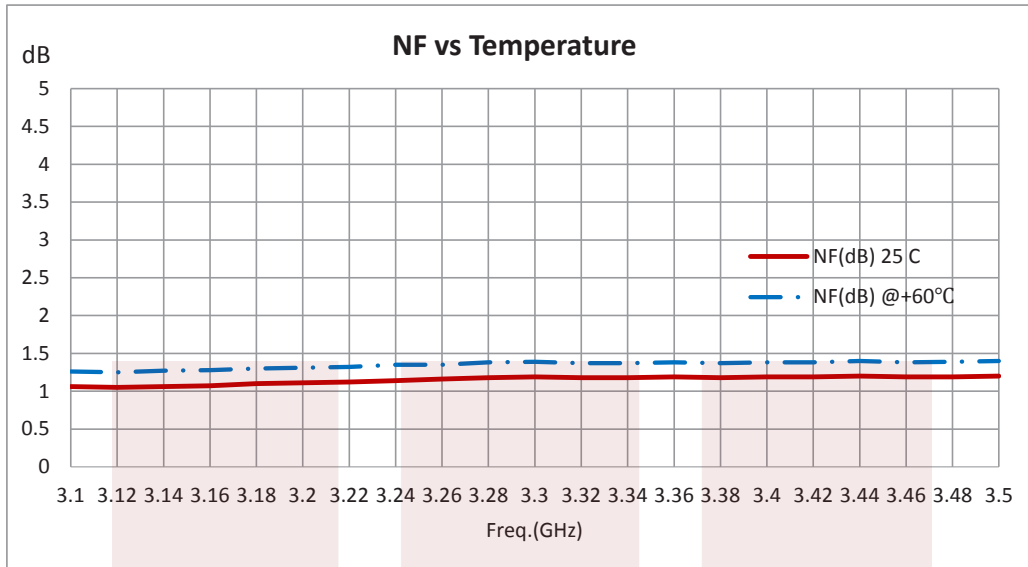
**Plotted and Other Data**

Notes:

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

**Power Data**



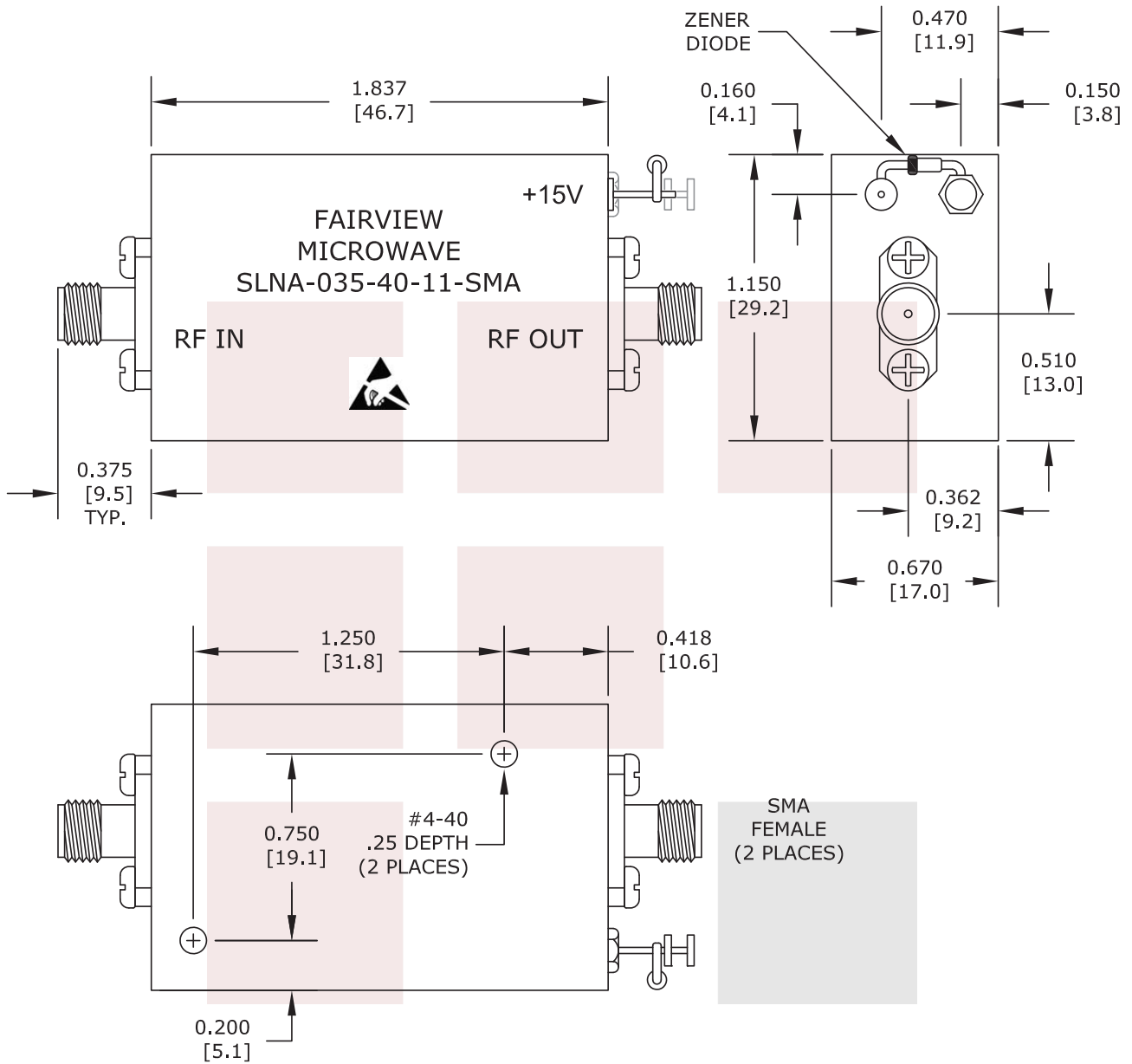


40 dB Gain 1.1 dB NF Low Noise High Gain Amplifier Operating From 3.1 GHz to 3.5 GHz with 15 dBm and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [40 dB Gain 1.1 dB NF Low Noise High Gain Amplifier Operating From 3.1 GHz to 3.5 GHz with 15 dBm and SMA SLNA-035-40-11-SMA](#)

URL: <http://www.fairviewmicrowave.com/40db-1.1db-nf-low-noise-high-gain-amplifier-slna-035-40-11-sma-p.aspx>

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|----------------------------------------------------------------------------------------------------------------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|--------------------|-------------|
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| TITLE<br>40 dB Gain 1.1 dB NF Low Noise High Gain Amplifier<br>Operating From 3.1 GHz to 3.5 GHz with 15 dBm and SMA |        | DWG NO<br>SLNA-035-40-11-SMA                                                                                                                                                        |       | CAGE CODE<br>3FKR5 |             |
| CAD FILE                                                                                                             | 050914 | SHEET                                                                                                                                                                               | SCALE | N/A                | SIZE A 2233 |