

The **SM2527-50L** is a 2.5 to 2.7 GHz Solid State GaAs FET amplifier designed for various markets including Broadband Wireless Access. The unit provides a minimum of +50 dBm of Output Power at P1dB, an OIP3 of +68 dBm, and Linear Gain of 59 dB. Our proprietary pre-distortion technique improves the OIP3 by almost 8 dB. It is available in modular form (standard), or as a rack mountable amplifier.

**Features**

- Single Power Supply
- Over/Reverse Voltage Protection
- Thermal Protection with Auto Reset

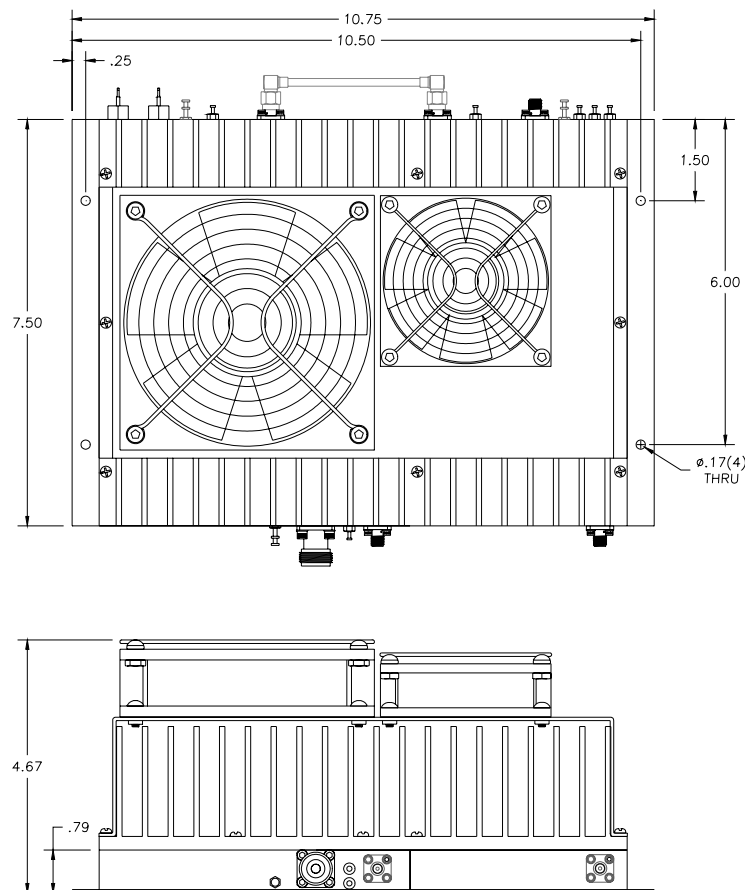
**Options**

- Forward/Reverse Power Detection
- RF Sampling
- Integral Heatsink with two cooling fans
- Logic On/Off Control



| Parameter                    | Specification   |
|------------------------------|---|
| Frequency Range              | 2.5 - 2.7 GHz   |
| Pout (P1dB) - 0° to 55°C     | +50 dBm   |
| Third Order Intercept Point  | +68 dBm (typ.)  |
| Linear Gain                  | 59 dB ± 1 dB  |
| Gain Flatness over Full Band | ± 0.5 dB  |
| Input/Output Return Loss     | -14 dB / -14 dB   |
| DC Input Voltage             | +12 Volts   |
| DC Input Current, typ.       | 31 Amps (Varies per application)  |
| Mechanical Dimensions        | w/cvr/htsk/fans:<br>10.75 x 7.5 x 4.7 inches<br>without cvr/htsk/fans:<br>9.75 x 7.5 x .78 inches |
| RF Connectors                | Input: SMA Female<br>Output: N-Type Female  |
| Operating Temperature        | 0°C to 55°C   |
| Operating Humidity           | 95% Non-condensing  |
| Operating Altitude           | Up to 10,000 feet above Sea Level   |

**DIMENSIONS IN INCHES**



| Pin       | Description                      | Values   |
|-----------|----------------------------------|--|
| RF Input  | Input Connector (SMA Female)     | - 9 dBm, typical                               |
| RF OUT    | Output Connector (N-Type Female) | +50 dBm @P1dB                                  |
| RF SAMPLE | Sample RF Port (SMA Female)      | 30 dB  |
| GND       | Ground Turret                    | ---  |
| REV       | Reverse Power Detector           | $\infty$ VSWR @ + 50 dBm $\approx$ + 5.5 Volts |
| FWD       | Forward Power Detector           | + 50 dBm Output Power $\approx$ + 5.5 Volts    |
| +12VDC    | DC Input Voltage                 | + 12 Volts @ 31 Amps (typ.)                    |
| On/Off    | TTL Logic On/Off                 | 0 Volts = Off, +5 Volts = On                   |

*Specifications subject to change without notice.*