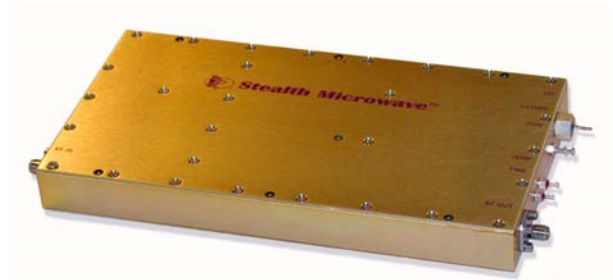


The **SM09296-47** is a 925-960 MHz solid state GaAs FET amplifier designed for the Cellular/GSM telephony market. It is one of the smallest amplifiers in the industry to deliver 50 watts. The output IP3 is +58 dBm, and the linear gain is 58 dB with only  $\pm 0.5$  dB gain change over the full temperature range of 0 to +55 °C. The optional level control allows for voltage variable gain control with up to 32 dB of dynamic range. The unit is available standard in modular form or as a rack mountable amplifier.



### Features

- Mis-Match Protected
- Single Power Supply
- Level Control
- Over/Reverse Voltage Protection
- Thermal Protection with Auto Reset

### Options

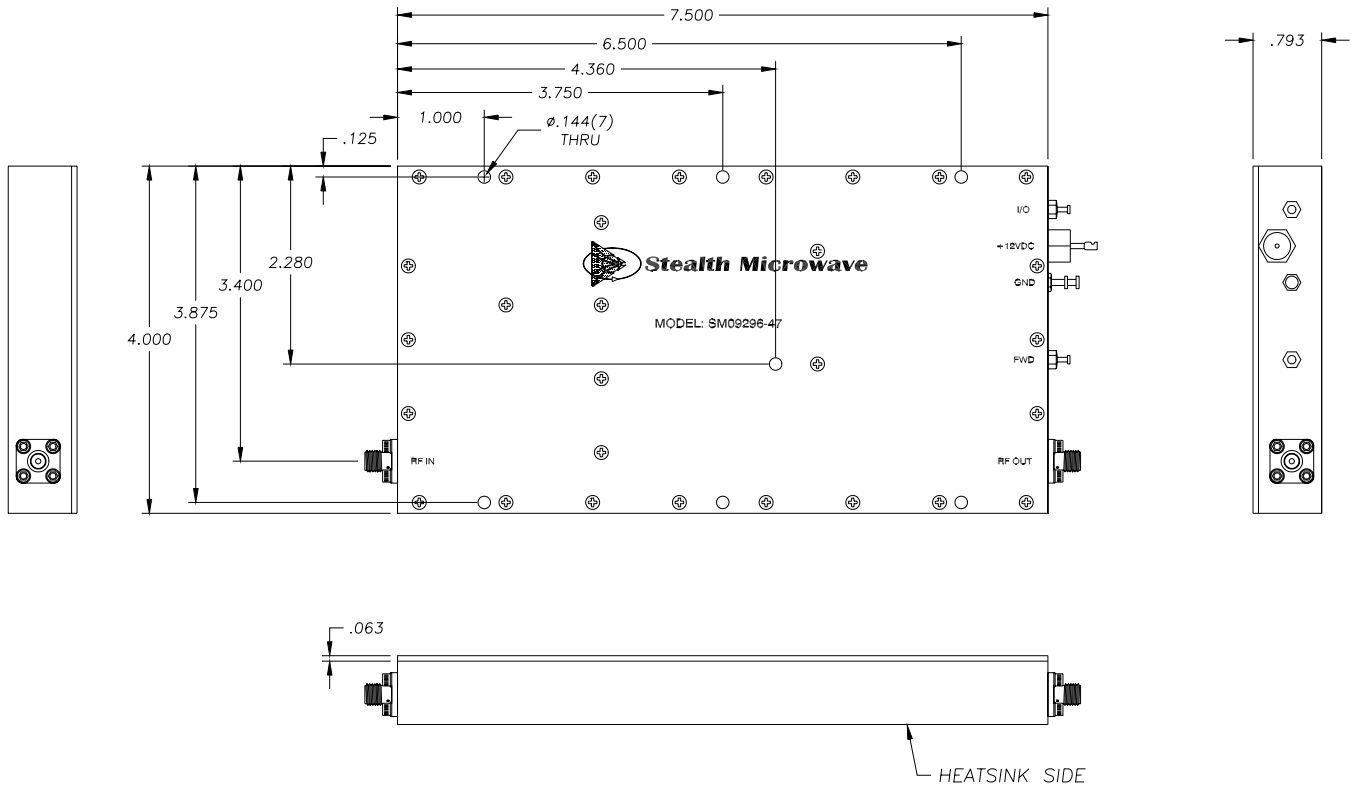
- Forward/Reverse Power Detection
- Harmonic Filter
- Logic On/Off Control
- Heatsink

### Configurations

- Module
- 19" Rack

| Parameter                              | Specification                     |
|--|-----------------------------------|
| Frequency Range                        | 925 – 960 MHz                     |
| Pout (P1dB)                            | + 47 dBm                          |
| Third Order Intercept Point            | + 58 dBm                          |
| Linear Gain                            | 58 dB $\pm$ 1 dB                  |
| Gain Flatness over Full Band           | $\pm .5$ dB                       |
| Gain Change over Temperature           | $\pm .5$ dB                       |
| Input/Output Return Loss               | -14 dB / -14 dB                   |
| DC Supply                              | + 12 Volts<br>@ 16.5 Amperes      |
| Mechanical Dimensions Without Heatsink | 7.5 x 4.0 x 0.8 inches            |
| RF Connectors                          | SMA 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)  | - 8 dBm, typical                            |
| RF Output | Output Connector (SMA Female) | + 47 dBm (P1 dB)                            |
| GND       | Ground Turret                 | ---   |
| FWD       | Forward Power Detector        | + 35 dBm Output Power $\approx$ + 2.5 Volts |
| +12VDC    | DC Input Voltage              | + 12 Volts @ 16.5 Amperes                   |
| I/O       | TTL Logic On/Off              | 0 Volts = Off, + 5 Volts = On               |

*Specifications subject to change without notice.*