

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 ± 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

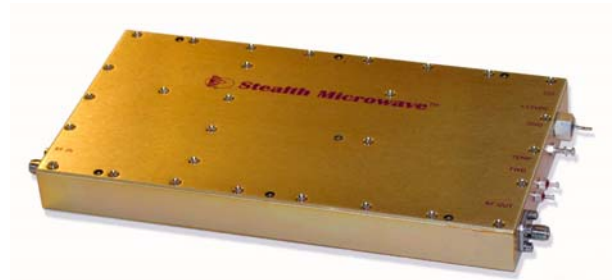
- Mis-Match Protected
- Single Power Supply
- Level Control
- Over/Reverse Voltage Protection
- Thermal Protection with Auto Reset

Options

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

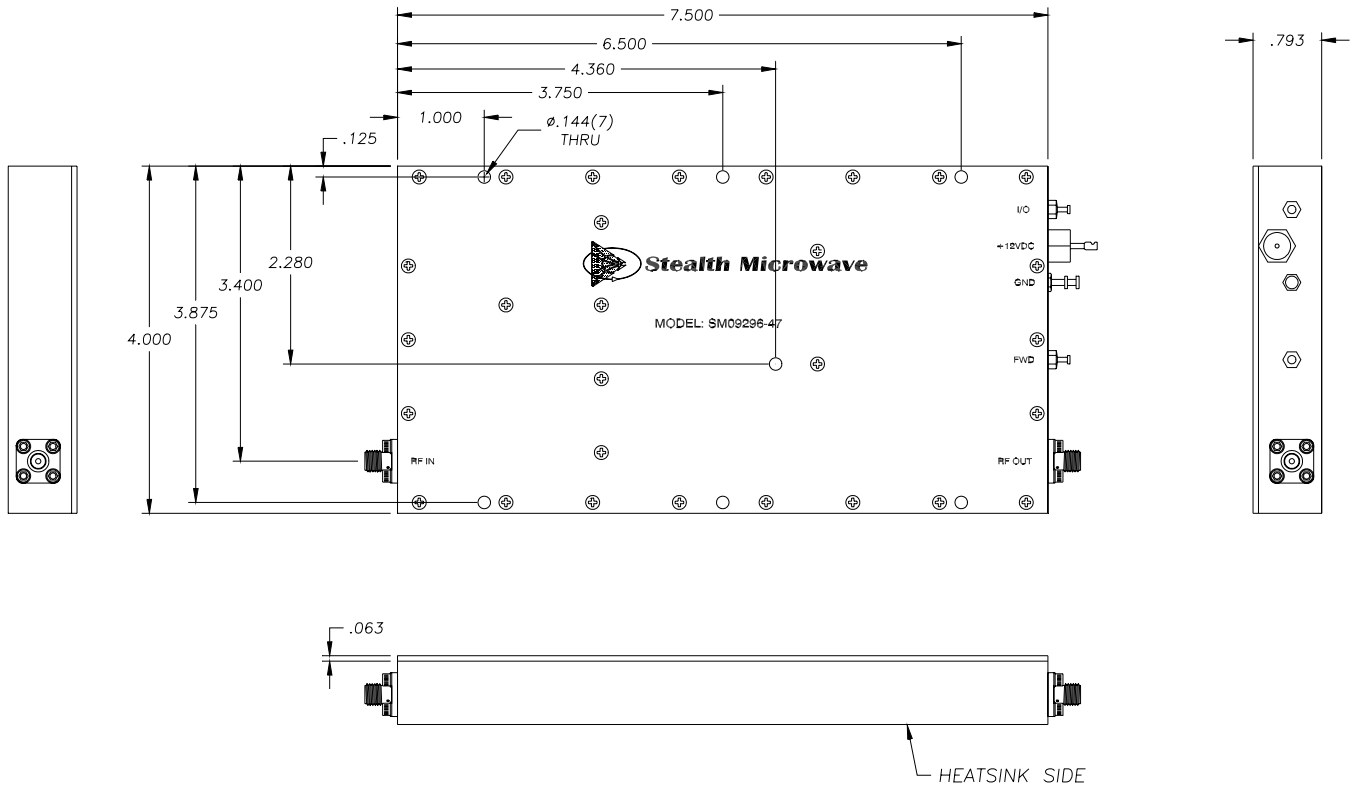
Configurations

- 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 @ 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.