

The **SM08790-47** is a 869-900 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

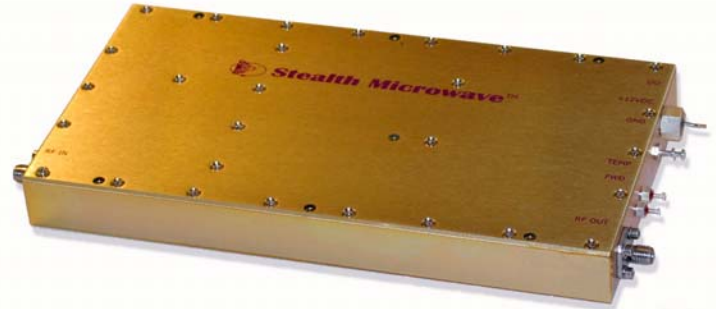
- Mis-Match Protected
- Single Power Supply
- Level Control
- Over/Reverse Voltage Protection
- Thermal Protection with Auto Reset

Options

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

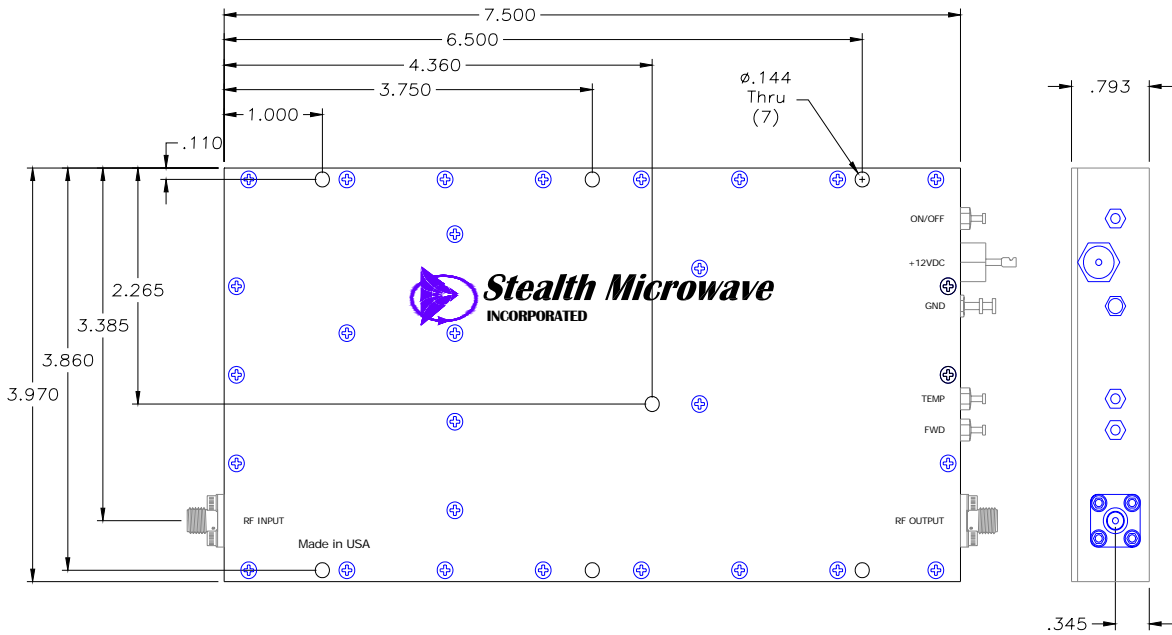
Configurations

- Module
- 19" Rack

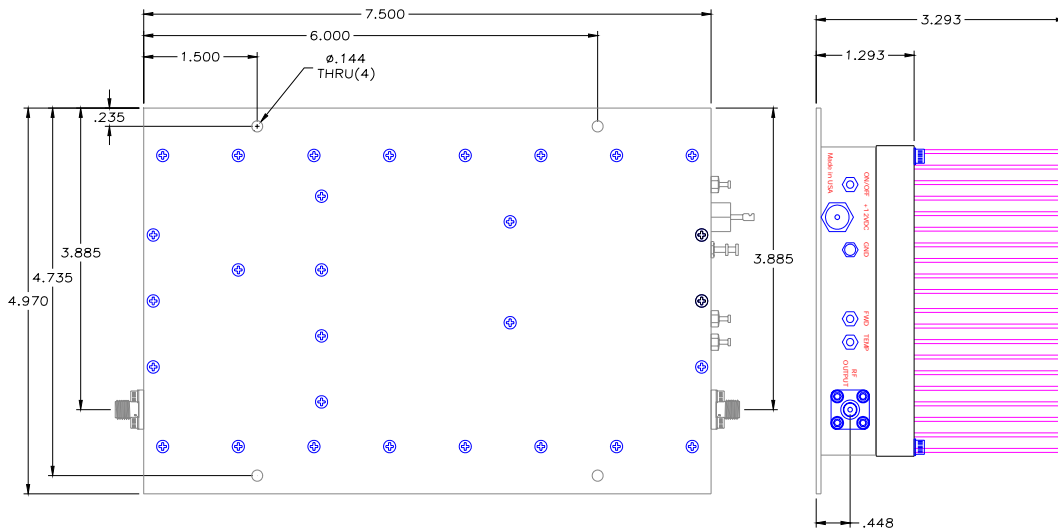


Parameter	Specification
Frequency Range	869 - 900 MHz
Pout (P1dB)	+ 47 dBm
Output Third Order Intercept	+ 58 dBm
Linear Gain	45 dB \pm 1 dB
Gain Flatness over Full Band	$\pm .5$ dB
Gain Change over Temperature	$\pm .5$ dB
Input/Output Return Loss	-13 dB / -13dB
DC Input Voltage	+ 12 Volts
DC Input Current, typ.	16.5 Amperes at 41 dBm avg. (CDMA)
Level Control (Optional)	32 dB
Low Pass Filter (Optional) Out of Band Harmonic Content	- 55 dBc
Mechanical Dimensions With Heatsink	7.5 x 3.7 x 2.2 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



HEATSINK OPTION



Pin	Description	Values
RF Input	Input Connector (SMA Female)	- 7 dBm, typical
RF Output	Output Connector (SMA Female)	+ 47 dBm
GND	Ground Turret	---
FWD	Forward Power Detector	+ 47 dBm Output Power \approx + 5 Volts
+12VDC	DC Input Voltage	+ 12 Volts @ 16.5 Amperes at 41 dBm avg. CDMA
On/Off	TTL Logic On/Off	0 Volts = Off, + 5 Volts = On
TEMP	Temperature Detector	55 degC = 5V

Specifications subject to change without notice.