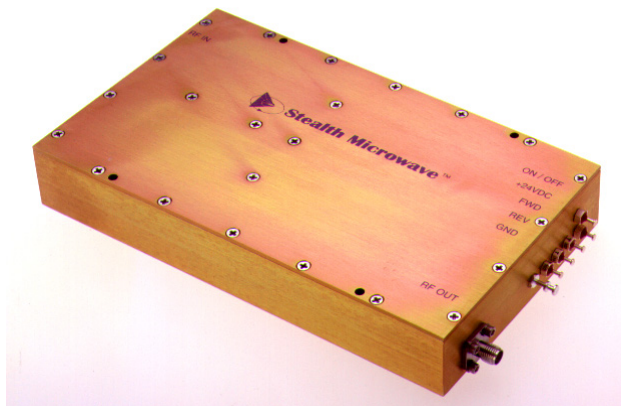


The **SM08590-45LD** is a solid state LDMOS amplifier designed for the Cellular/GSM telephony market. It is one of the smallest amplifiers in the industry to deliver a P1dB of 30 watts. The operating frequency is 850-900 MHz, and the linear gain is 50 dB with a gain flatness of ± 0.5 dB across the band. The unit operates off a single positive supply voltage of +24V, and draws less than 7 A of current. The amplifier is available in modular form (standard), or as a 19" rack mount unit.



Features

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

Options

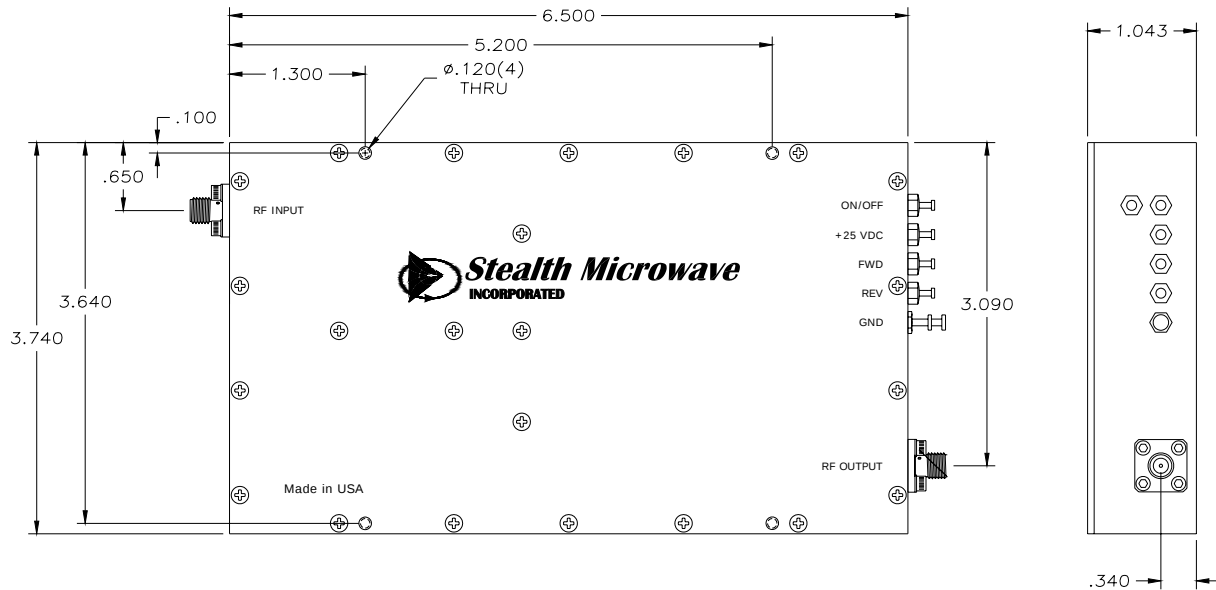
- Forward/Reverse Power Detection
- Harmonic Filter
- Logic On/Off Control
- Integral Heatsink

Configurations

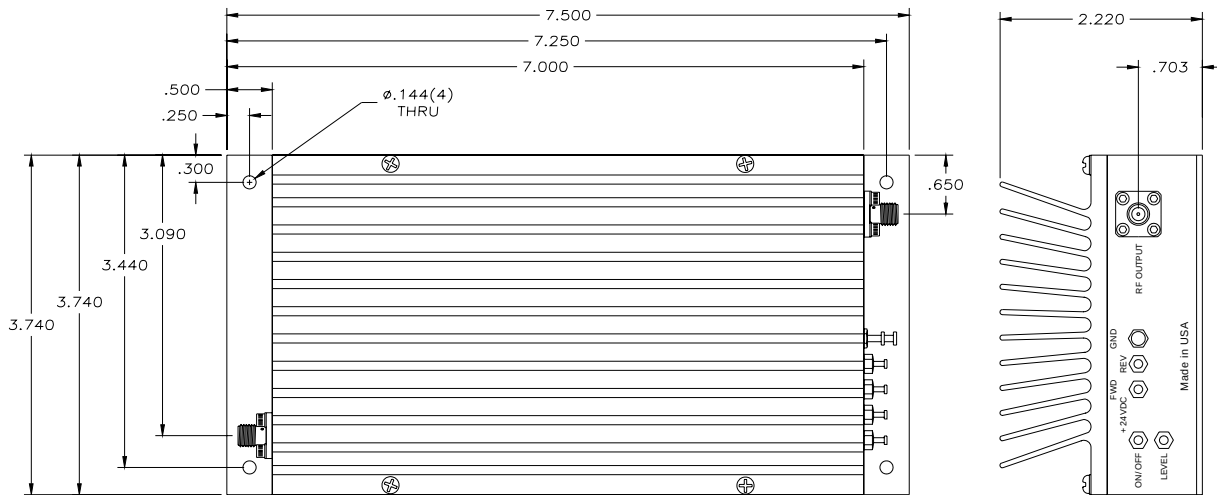
- Module
- 19" Rack

Parameter	Specification
Frequency Range	850 - 900 MHz
Pout (P1dB)	+ 45 dBm
Third Order Intercept Point	+ 55 dBm
Linear Gain	50 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 / -13 dB
DC Supply	+24 Volts @ 6.6 Amperes (4.8 Amperes Quiescent)
Level Control	32 dB
Harmonic Filter (Optional)	- 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



Specifications subject to change without notice.

Pin	Description	Values
RF Input	Input Connector (SMA Female)	- 4 dBm, typical
RF Output	Output Connector (SMA Female)	+ 45 dBm
GND	Ground Turret	---
REV	Reverse Power Detector	∞ VSWR @ + 45 dBm $\approx$ + 5 Volts
FWD	Forward Power Detector	+ 45 dBm Output Power $\approx$ + 5 Volts
+24VDC	DC Input Voltage	+ 24 Volts @ 6.6 Amperes (4.8 Amperes Quiescent)
On/Off	TTL Logic On/Off	0 Volts = Off, + 5 Volts = On
Level	Voltage Variable Attenuator (VVA)	0 Volts = 0 dBr, + 5 Volts $\geq$ - 32 dBr