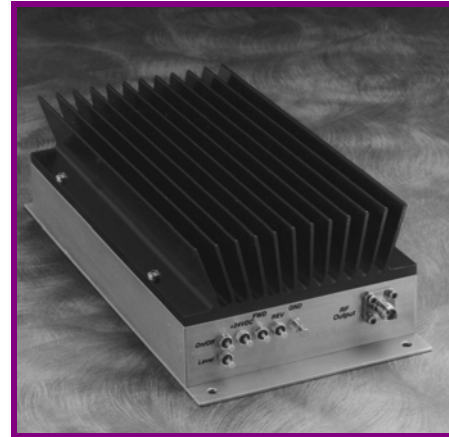


The **SM08790-45LDL** is an 869-896 MHz, 30 W solid state LDMOS amplifier designed for the Cellular/GSM telephony market. Its compact size and ultra high linearity make it ideally suited for systems using CDMA, TDMA, or high dynamic range multi-carrier applications. Our proprietary pre-distortion technique enables us to provide an output third order intercept of +64 dBm. The linear gain is 50 dB with only  $\pm 0.5$  dB of gain change over the full temperature range of 0 to +55 °C. The unit comes standard in modular form or as a rack mountable amplifier.



### Features

- Mis-Match Protected
- Built in linearizer increases the OIP3 by over 7 dB
- Temperature compensation
- Single Power Supply
- Over/reverse voltage protection
- Thermal protection with auto reset

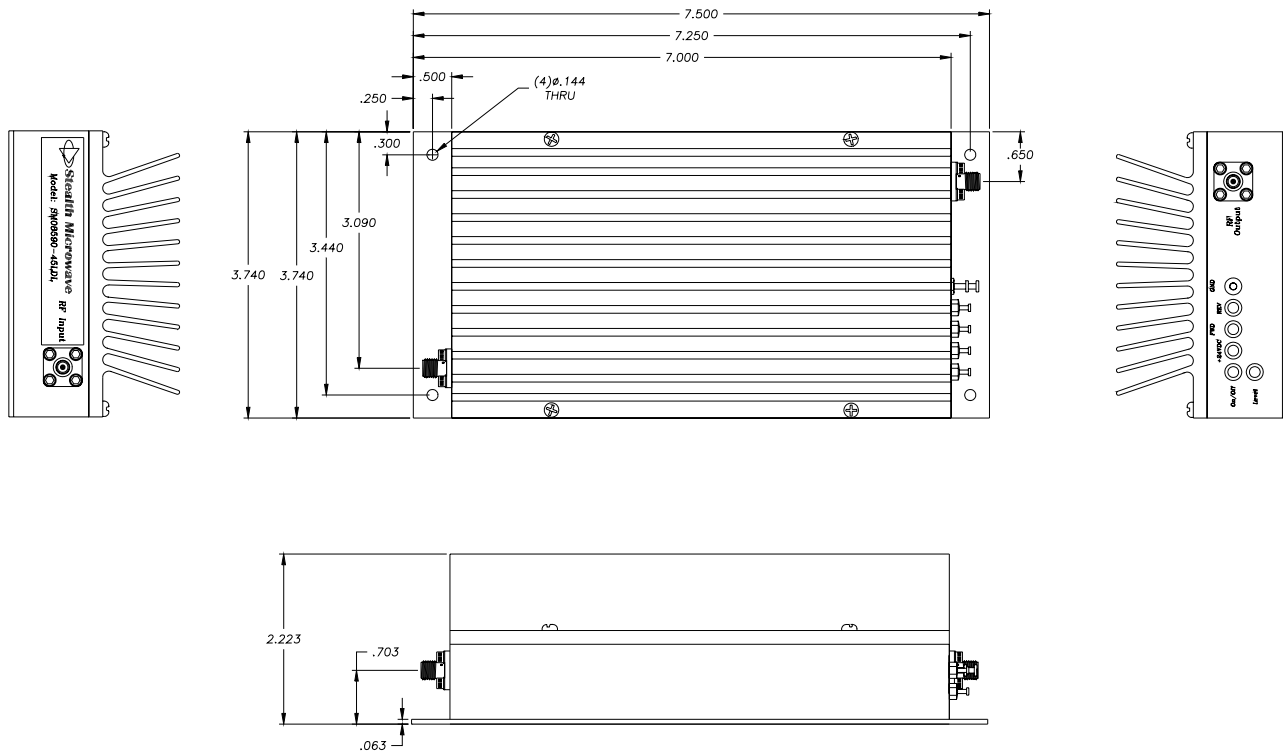
### Options

- Forward/reverse power detection
- Harmonic Filter
- Logic on/off control
- Heatsink available

### Configurations

- Module
- 19" Rack

Parameter	Specification
Frequency Range	869 - 896 MHz
Pout (P1dB)	+ 45 dBm
Third Order Intercept Point	+ 64 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 Voltage	+ 24 Volts
DC Supply Current	5.0 Amperes (Varies per application)
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**


Pin	Description	Values
RF Input	Input Connector (SMA Female)	- 4 dBm, typical
RF Output	Output Connector (SMA Female)	+45 dBm @P1dB
GND	Ground Turret	---
REV	Reverse Power Detector	$\infty$ VSWR @ + 45 dBm $\approx$ + 5 Volts
FWD	Forward Power Detector	+ 45 dBm Output Power $\approx$ + 5 Volts
+24VDC	DC Input Voltage	+ 24 Volts @ 4.8 Amperes (typ.)
On/Off	TTL Logic On/Off	0 Volts = Off, + 5 Volts = On

Specifications subject to change without notice.