

# Model SM09195-45LD

#### 917-950 MHz 30 Watt Linear Power Amplifier FOR GSM APPLICATIONS

The **SM09195-45LD** 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 917-950 MHz, and the linear gain is 50 dB with a gain flatness of  $\pm$  0.5 dB across the band. The unit operates off a single positive supply voltage of +24V, and draws less than 6.6 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



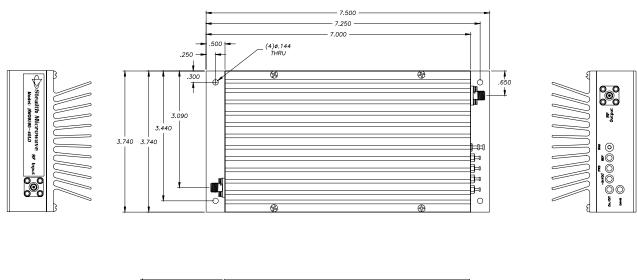
Parameter	Specification
Frequency Range	917 - 950 MHz
Pout (P1dB)	+ 45 dBm
Third Order Intercept Point	+ 55 dBm
Linear Gain	$50 \text{ dB} \pm 1 \text{ dB}$
Gain Flatness over Full Band	± .5 dB
Gain Change over Temperature	± .5 dB
Input/Output Return Loss	-13 dB / -13 dB
DC Supply	+ 24 Volts @ 6.6 Amperes (4.8 Amps 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

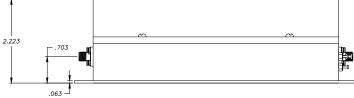


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### **DIMENSIONS IN INCHES**





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	$\infty$ 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)	$0 \text{ Volts} = 0 \text{ dBr}, + 5 \text{ Volts} \ge - 32 \text{ dBr}$

Specifications subject to change without notice.