

Model SM09397-45LDL

930-970 MHz 30 Watt Linear Power Amplifier FOR GSM APPLICATIONS

The **SM9397-45LDL** is a 930-970 MHz, 30 watt 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



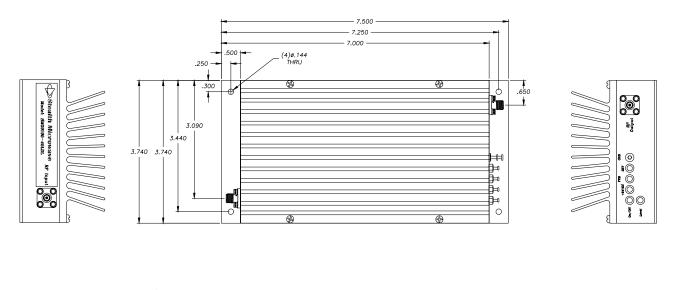
Parameter	Specification
Frequency Range	930 – 970 MHz
Pout (P1dB)	+ 45 dBm
Third Order Intercept Point	+ 64 dBm
Linear Gain	$50 \text{ dB} \pm 1 \text{ dB}$
Gain Flatness over Full Band	± .5 dB
Gain Change over Temperature	± .5 dB
Input/Output Return Loss	-13 dB / -13 dB
DC Supply Voltage	+ 24 Volts
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

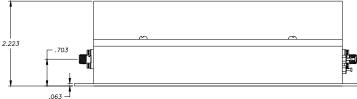


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DIMENSIONS IN INCHES





Pin	Description	Values
RF Input	Input Connector (SMA Female)	- 4 dBm, typical
RF Output	Output Connector (SMA Female)	+45 dBm @P1dB
GND	Ground Turret	
REV	Reverse Power Detector	∞ VSWR @ +45 dBm \approx +5 Volts
FWD	Forward Power Detector	+ 45 dBm Output Power \approx + 5 Volts
+28VDC	DC Input Voltage	
On/Off	TTL Logic On/Off	0 Volts = Off, + 5 Volts = On

Specifications subject to change without notice.