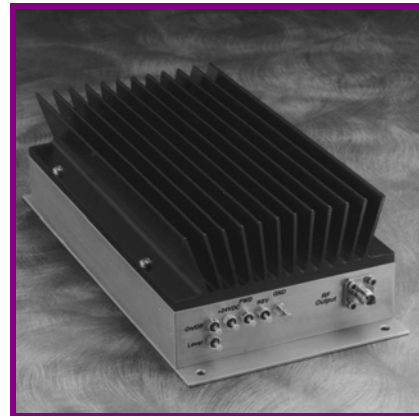


The **SM08590-45LDL** is a 917-950 MHz, 30 W solid state LDMOS amplifier designed for the Cellular/GSM telephony market. Its compact size and ultra high linearity make it ideally suited for systems using CDMA, TDMA, or high dynamic range multi-carrier applications. Our proprietary pre-distortion technique enables us to provide an output third order intercept of +64 dBm. The linear gain is 50 dB with only ± 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

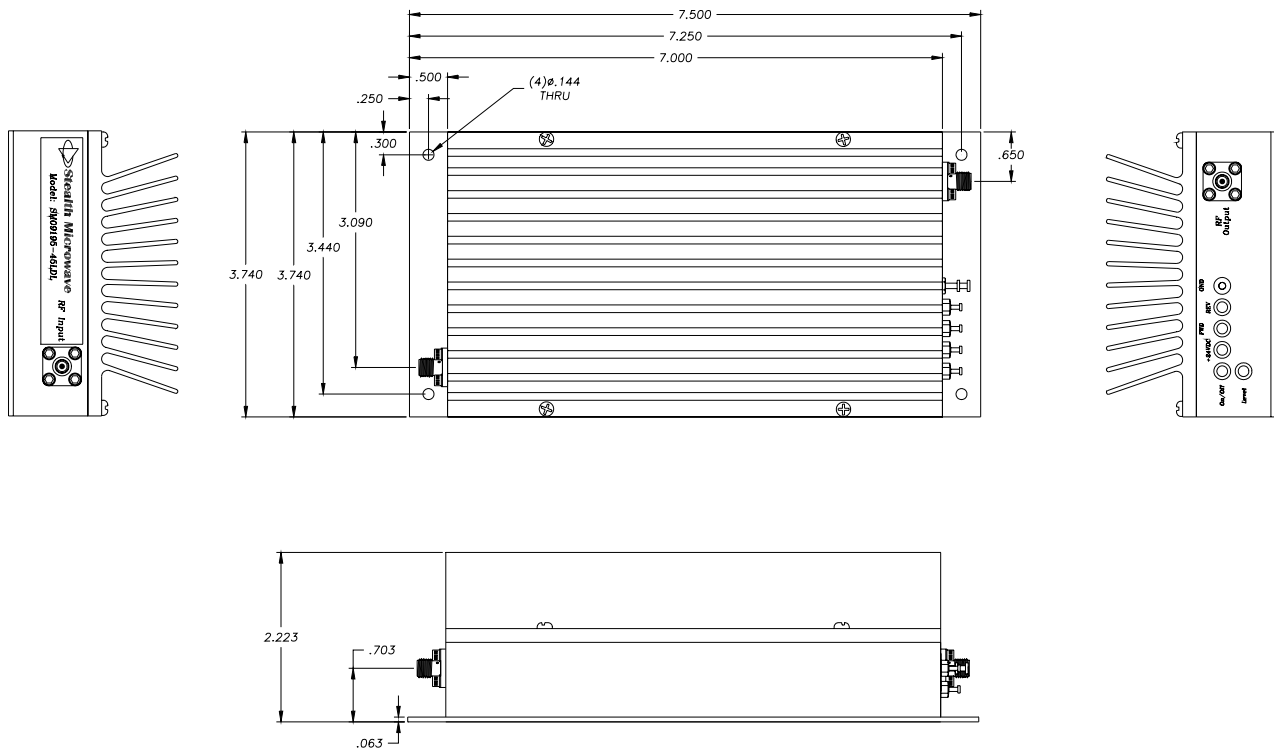
Options

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

Configurations

- Module
- 19" Rack

| Parameter | Specification |
|-------------------------------------|---|
| Frequency Range | 917 - 950 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 / -13dB |
| 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 | ∞ 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.