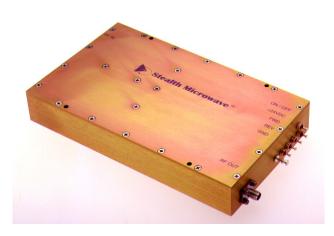




850-900 MHz 30 Watt Linear Power Amplifier For GSM Applications

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 \pm 0.5 dB across the band. The unit operates off a single positive supply voltage of \pm 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

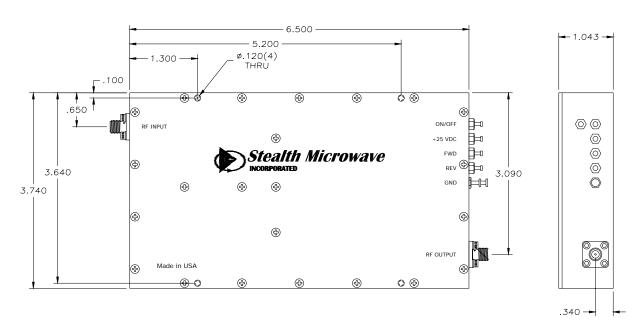
- Module
- 19" Rack

| Parameter | Specification |
|-------------------------------------|--|
| Frequency Range | 850 - 900 MHz |
| Pout (P1dB) | + 45 dBm |
| Third Order Intercept Point | + 55 dBm |
| Linear Gain | 50 dB ± 1 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 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 |

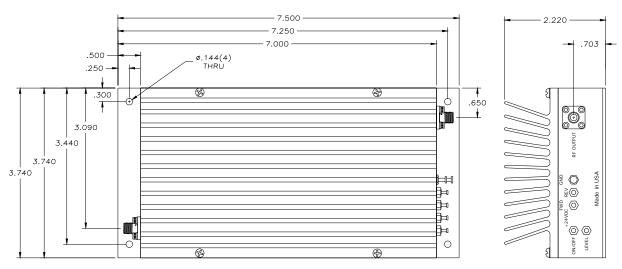
Email: sales@stealthmicrowave.com ♦ Web site: www.stealthmicrowave.com

850-900 MHz 30 Watt Linear Power Amplifier For GSM Applications

DIMENSIONS IN INCHES



HEATSINK OPTION





Model SM08590-45LD

850-900 MHz 30 Watt Linear Power Amplifier For GSM Applications

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