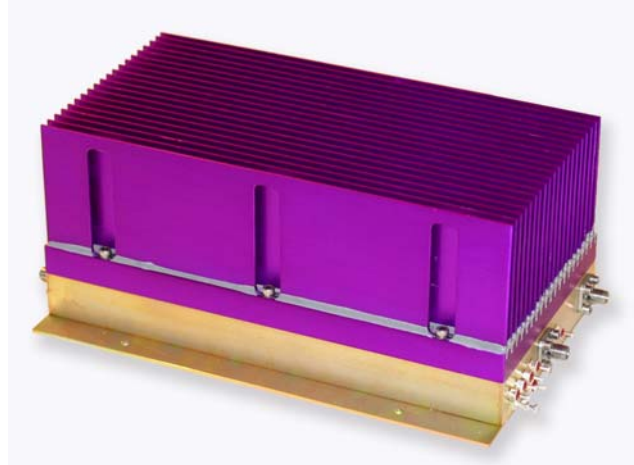


The **SM1923-44** is a solid state GaAs amplifier designed primarily for the Personal Communication Systems (PCS) market. This amplifier operates from 1.9-2.3 GHz, provides 55 dB of gain, ± 0.5 dB gain flatness over the full band, and +44 dBm of output power at its 1 dB compression point. The output third order intercept point is +55 dBm. Its compact size and high linearity make it ideally suited for systems using CDMA or TDMA standards. The unit is available standard as a module with six (6) thru-holes. Modular heatsink or 19" rack versions are available.



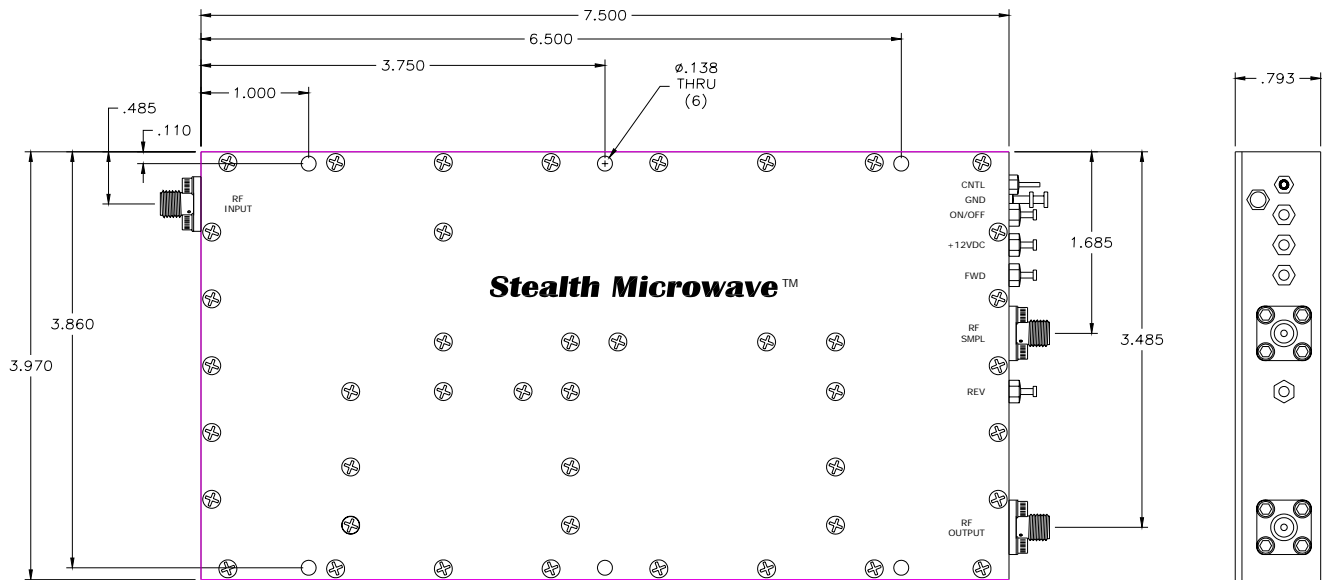
Features

- Single Power Supply
- Over Voltage Protection
- Thermal Protection with Auto Reset
- Temperature Compensation

Options

- Forward/Reverse Power Detection
- RF Sampling
- Pulse Control with switching speeds up to 100 kHz
- Logic On/Off Control
- Integral Heatsink

| Parameter | Specification |
|--|-----------------------------------|
| Frequency Range | 1.9 - 2.3 GHz (in 100 MHz Bands) |
| Pout (P1dB) | + 44 dBm |
| Third Order Intercept Point | + 55 dBm |
| Linear Gain | 55 dB \pm 1 dB |
| Gain Flatness over Full Band | $\pm .5$ dB |
| Gain Change over Temperature | $\pm .5$ dB |
| Input/Output Return Loss | -16 dB / -16 dB |
| DC Input Voltage | + 12 Volts |
| DC Input Current | 7.5 Amps. (operational) |
| Mechanical Dimensions Without Heatsink | 7.5 x 4.0 x 0.8 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) | -9 dBm typical |
| RF OUTPUT | Output Connector (SMA Female) | +44dBm @P1dB |
| RF SAMPLE | Sample RF Port (SMA Female) | 30 dBr |
| GND | Ground Turret | --- |
| FWD | Forward Power Detector | + 36 dBm Output Power \approx + 1.2 Volts |
| REV | Reverse Power Detector | ∞ VSWR @ + 36 dBm \approx + 3.0 Volts |
| +12VDC | DC Input Voltage | + 12 Volts @ 8.2 Amps (operational) |
| ON/OFF | TTL Logic On/Off | 0 Volts = Off, + 5 Volts = On |
| CNTL | TTL Pulse Control | Rates up to 100 kHz |

Specifications subject to change without notice.

1007 Whitehead Road Ext., Trenton, NJ 08638
 Tel: (609) 538-8586 ♦ Fax: (609) 538-8587
 Email: sales@stealthmicrowave.com ♦ Web site: www.stealthmicrowave.com