

The **SM2325-47L** is a solid state GaAs amplifier designed for the ISM, Fixed Wireless, and Wireless Local Loop markets. The amplifier operates from 2.3 to 2.5 GHz, provides 55 dB of linear gain, and the output power at P1dB is 50 watts. By using the latest surface mount technologies, this small amplifier can easily fit into tightly packed transmitters and repeaters.



Features

- Mis-Match Protected
- Single Power Supply
- Over/Reverse Voltage Protection
- Thermal Protection with Auto Reset
- Temperature Compensation
- Integral Output Isolator

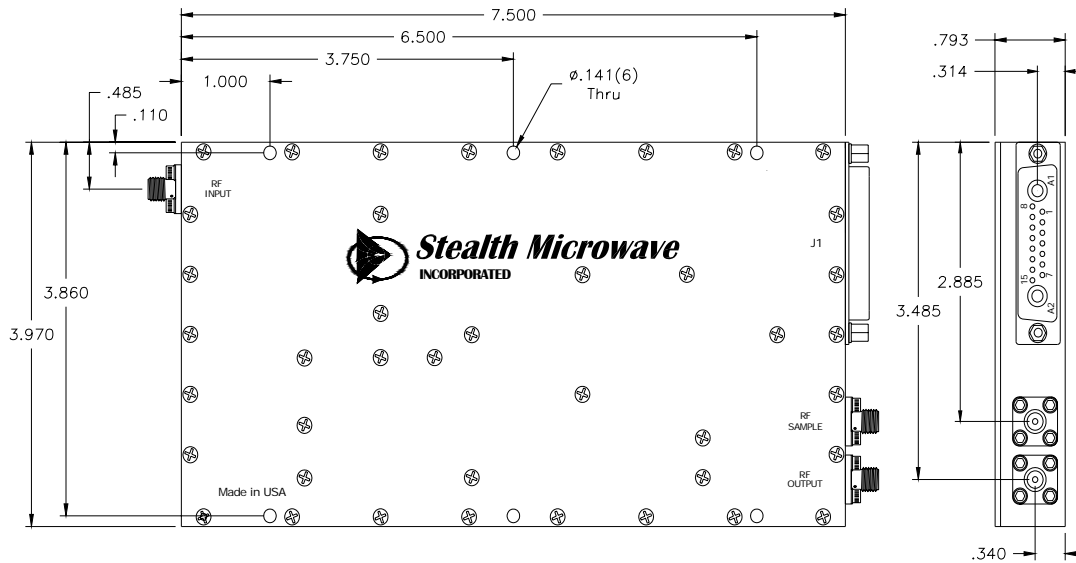
Options

- Forward/Reverse Power Detection
- RF Sampling
- Fan
- Pulse Control for TDD applications with <math><1\mu\text{s}</math> rise/fall time
- Logic On/Off Control
- Integral Heatsink

Configurations

- Module
- 19" Rack
- Bench-Top-Lab unit

| Parameter | Specification |
|--|--|
| Frequency Range | 2.3 - 2.5 GHz |
| Pout (P1dB) | + 47 dBm (typ.) |
| Third Order Intercept Point | + 63 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 | -14 dB /-18 dB |
| DC Input Voltage | + 12 Volts |
| DC Input Current | 18 Amperes (Varies per application) |
| Mechanical Dimensions (Without Heatsink) | 7.5 x 4.0 x .8 inches |
| RF Connectors | SMA Female |
| Operating Temperature (Baseplate) | 0°C to +55°C |
| Operating Humidity | 95% Non-condensing |
| Operating Altitude | Up to 10,000 feet above Sea Level |

DIMENSIONS IN INCHES


| PIN | FNCT. | COLOR |
|------|--------------|--------|
| 1 | CNTL. (HS) | ORANGE |
| 2 | TTL (On/Off) | |
| 3 | ADDRESS A1 | |
| 4 | SCL | WHITE |
| 5 | SDA | PURPLE |
| 6 | REV. DET. | YELLOW |
| 7 | FWD. DET. | GREEN |
| 8-15 | GND. | BLACK |

| PIN | FNCT. | COLOR |
|-----|-------|--------|
| A1 | +12V | PURPLE |
| A2 | GND. | BLACK |

| Pin | Description | Values |
|-----------|-------------------------------|--|
| RF Input | Input Connector (SMA Female) | - 6 dBm, typical |
| RF OUT | Output Connector (SMA Female) | +47 dBm @P1dB |
| RF SAMPLE | Sample RF Port (SMA Female) | 30 dB |
| GND | Ground Turret | --- |
| REV | Reverse Power Detector | ∞ VSWR @ + 38 dBm \approx + 1.0 Volts |
| FWD | Forward Power Detector | + 38 dBm Output Power \approx + 2.5 Volts |
| +12VDC | DC Input Voltage | + 12 Volts @ 18 Amperes (typ.) |
| On/Off | TTL Logic On/Off | 0 Volts = Off, + 5 Volts = On |

Specifications subject to change without notice.