

The **SM2122-44L** is a solid state GaAs amplifier designed for the UMTS market. This unit operates from 2.1 to 2.2 GHz, provides 55 dB of gain with a  $\pm 0.5$  dB flatness, and has a P1dB of +44 dBm. Stealth Microwave's proprietary linearization technique provides an OIP3 of +63 dBm. The compact size and ultra high linearity make this amplifier ideally suited for systems using CDMA, TDMA, single-carrier or multi-carrier applications.



### Features

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

### Options

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

### Configurations

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

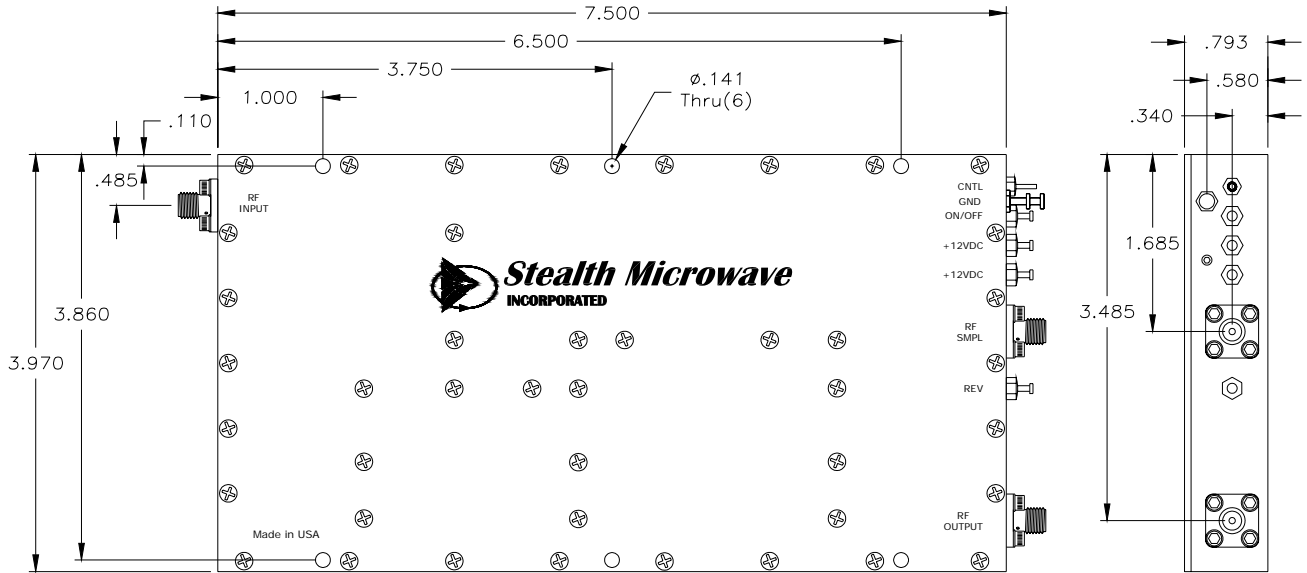
| Parameter                                | Specification           |
|--|-------------------------|
| Frequency Range                          | 2.1 – 2.2 GHz           |
| Pout (P1dB)                              | + 44 dBm                |
| Third Order Intercept Point              | + 63 dBm                |
| 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                 | -16 dB / -16 dB         |
| DC Input Voltage                         | + 12 Volts              |
| DC Input Current                         | 8.2 Amps. (operational) |
| Mechanical Dimensions (Without Heatsink) | 7.5 x 4.0 x 0.8 Inches  |
| RF Connectors                            | SMA Female              |
| Operating Temperature (Baseplate)        | 0°C to +55°C            |
| Operating Humidity                       | 95% Non-condensing      |

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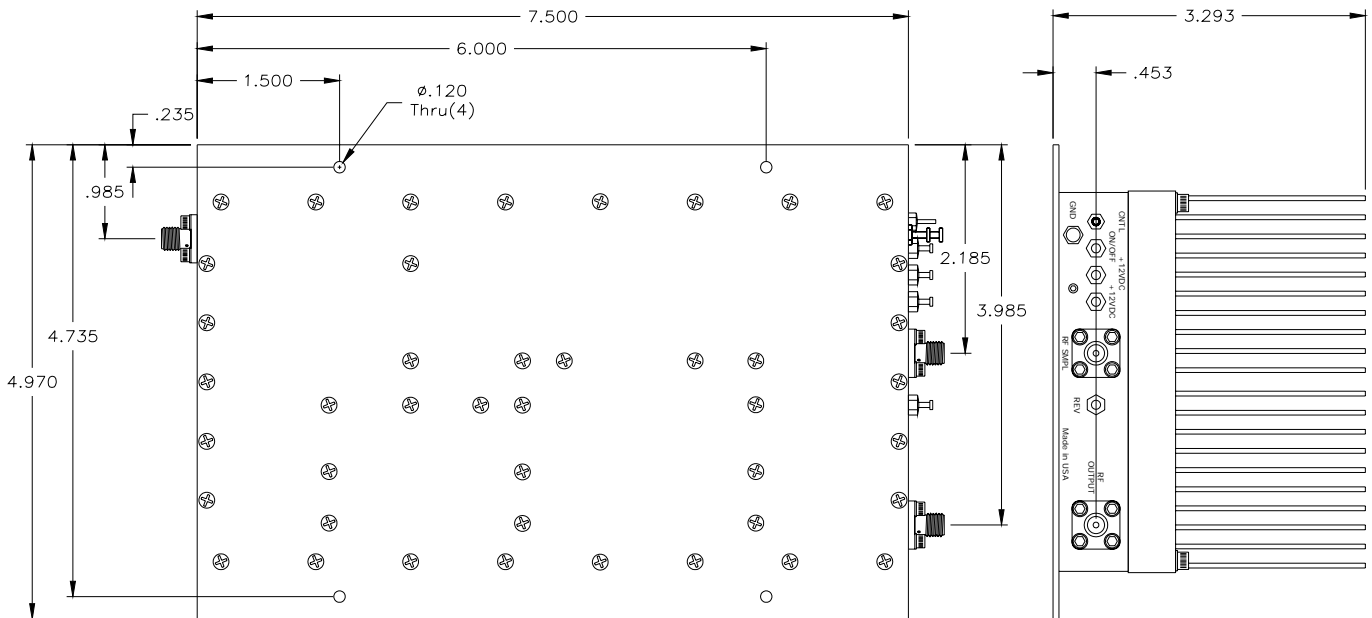
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**DIMENSIONS IN INCHES**



**HEATSINK OPTION**



| 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         | + 44 dBm Output Power $\approx$ + 4.0 Volts    |
| REV       | Reverse Power Detector         | $\infty$ VSWR @ + 44 dBm $\approx$ + 4.0 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.*