

The **SM1720-42** is a solid state GaAs amplifier designed for various wireless applications. This amplifier operates from 1.7-2.0 GHz, provides 50 dB of gain, ± 0.5 dB gain flatness over the full band, and +42 dBm of output power at its 1 dB compression point. The output third order intercept point is +53 dBm. Its compact size and high linearity make it ideally suited for systems using CDMA or TDMA standards.

Features

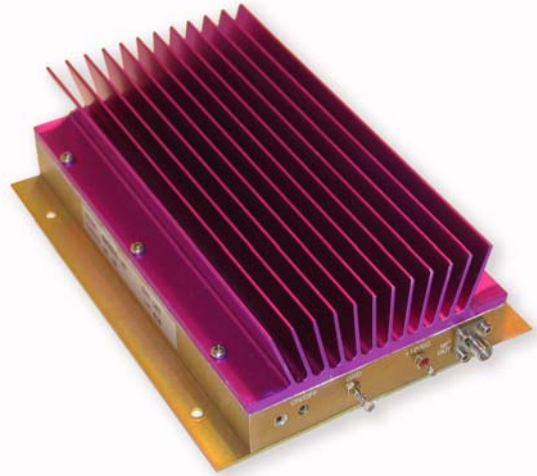
- Single Power Supply
- Over/Reverse Voltage Protection
- Thermal Protection with Auto Reset

Options

- Heatsink
- Forward Power Detection
- Logic On/Off Control
- High Speed Switching for TDD

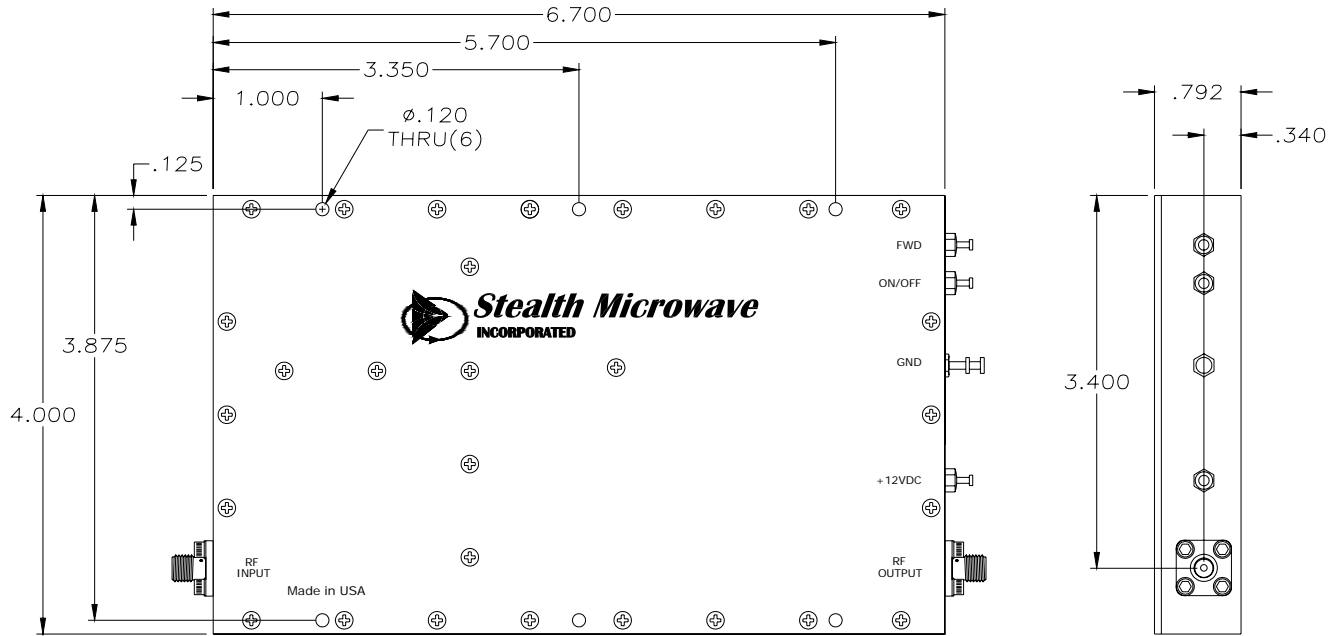
Configurations

- Module
- Laboratory Unit
- 19" Rack

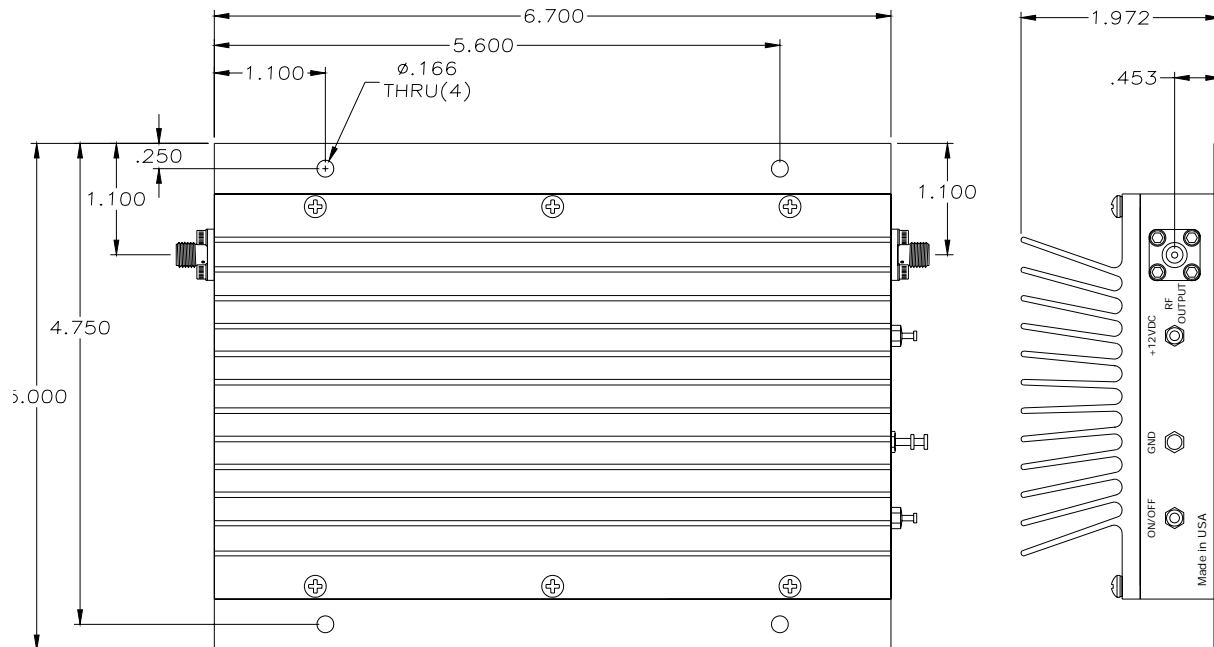


| Parameter | Specification |
|------------------------------|--|
| Frequency Range | 1.7 – 2.0 GHz |
| Pout (P1dB) | + 42 dBm |
| Third Order Intercept Point | + 53 dBm (typ.) |
| Linear Gain | 50 dB \pm 1.0 dB |
| Gain Slope Full Band | $\pm .5$ dB |
| Gain Change over Temperature | $\pm .5$ dB |
| Input/Output Return Loss | -14dB / -14dB |
| DC Input Voltage | +12 Volts |
| DC Input Current | 6.6 Amps |
| Mechanical Dimensions | w/o heatsink: 6.7 x 4.0 x 0.8 in. w/heatsink: 6.7 x 4.0 x 2.0 in. |
| 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



HEATSINK OPTION



| Pin | Description | Values |
|----------|-------------------------------|-------------------------------|
| RF Input | Input Connector (SMA Female) | -6 dBm typical |
| RF OUT | Output Connector (SMA Female) | +42dBm @P1dB |
| GND | Ground Turret | --- |
| +12VDC | DC Input Voltage | + 12 Volts @ 6.0 Amps (typ.) |
| ON/OFF | TTL Logic On/Off | 0 Volts = Off, + 5 Volts = On |

Specifications subject to change without notice.