

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,  $\pm 0.5$  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

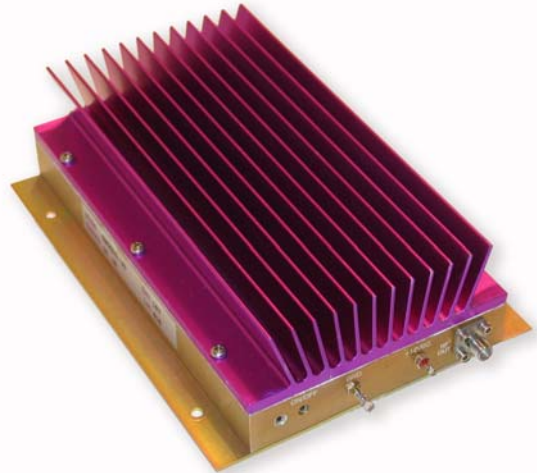
- Single Power Supply
- Over/Reverse Voltage Protection
- Thermal Protection with Auto Reset

### Options

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

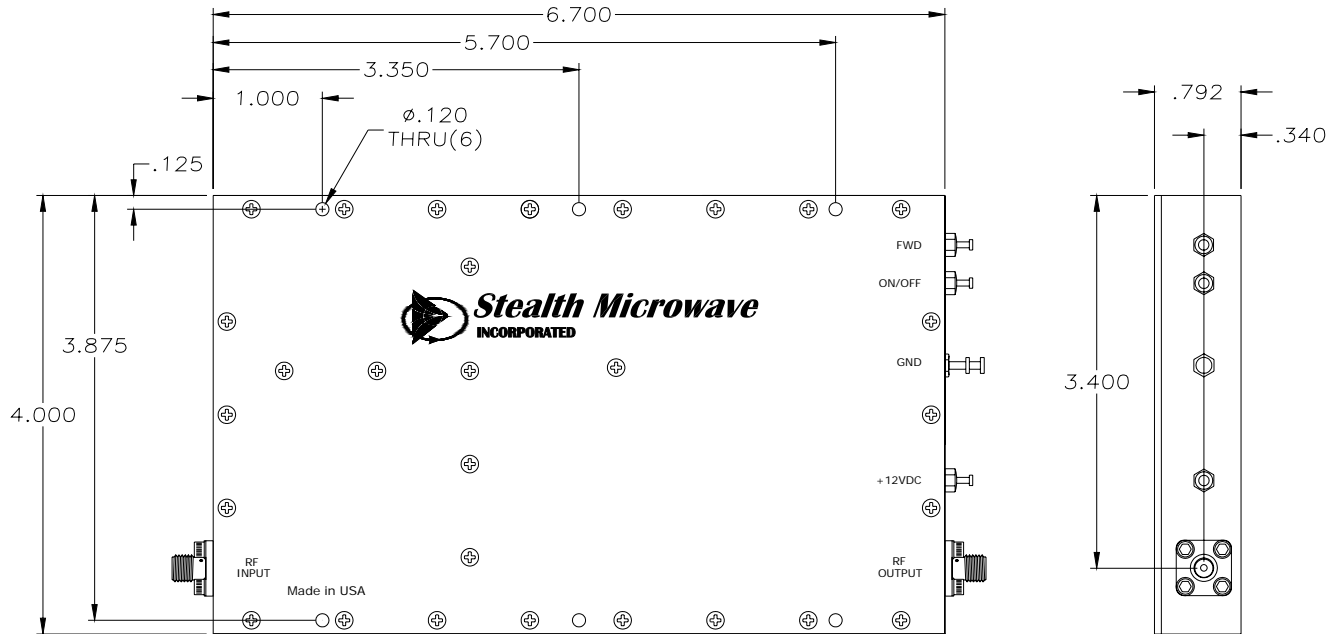
### Configurations

- Module
- Laboratory Unit
- 19" Rack

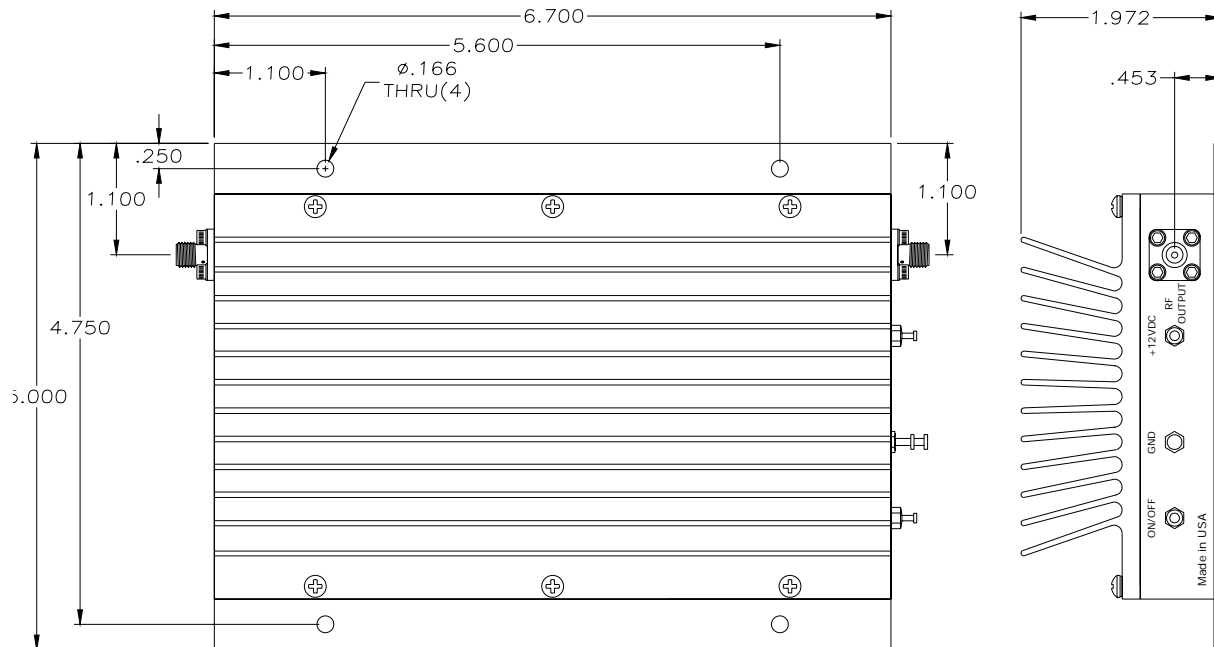


Parameter	Specification
Frequency Range	1.7 – 2.0 GHz
Pout (P1dB)	+ 42 dBm
Third Order Intercept Point	+ 53 dBm (typ.)
Linear Gain	50 dB $\pm$ 1.0 dB
Gain Slope Full Band	$\pm .5$ dB
Gain Change over Temperature	$\pm .5$ dB
Input/Output Return Loss	-14dB / -14dB
DC Input Voltage	+12 Volts
DC Input Current	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.*