

The **SM1720-50** is a 1.7 to 2.0 GHz solid state GaAs amplifier designed for the Personal Communication Systems (PCS) market. Its compact size and high linearity make it ideally suited for systems using CDMA, TDMA, or other high dynamic range multi-carrier applications. The amplifier provides a P1dB of +50 dBm and a Linear Gain of 50dB.

**Features**

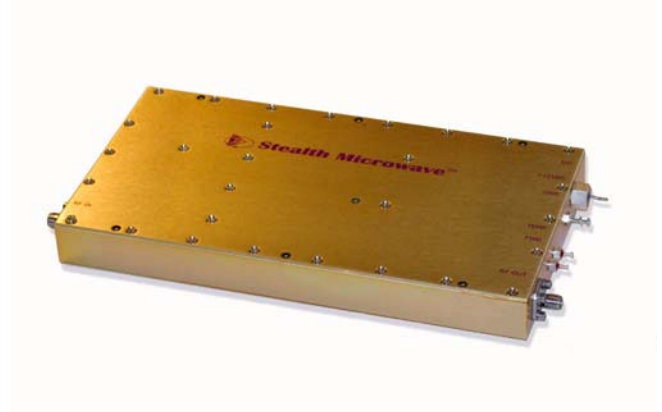
- Temperature Compensation
- Single Power Supply
- Over/Reverse Voltage Protection
- Thermal Protection with Auto Reset

**Options**

- Forward Power Detection
- Thermal Detector
- Fan
- TTL Logic On/Off Control
- Heatsink

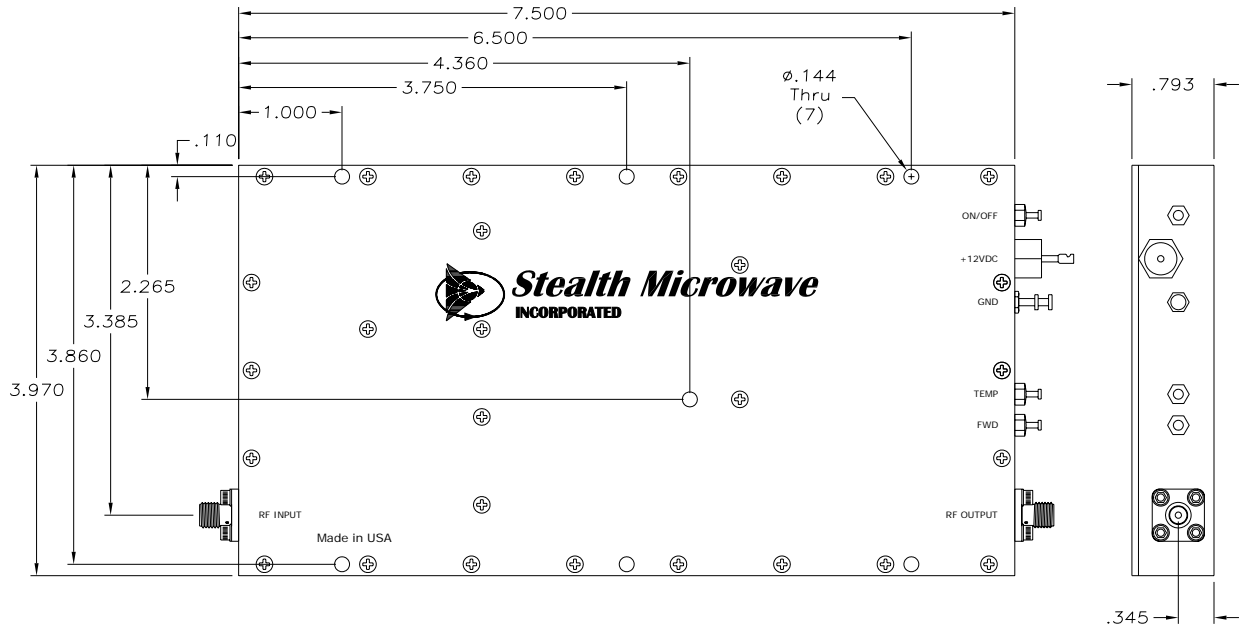
**Configurations**

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

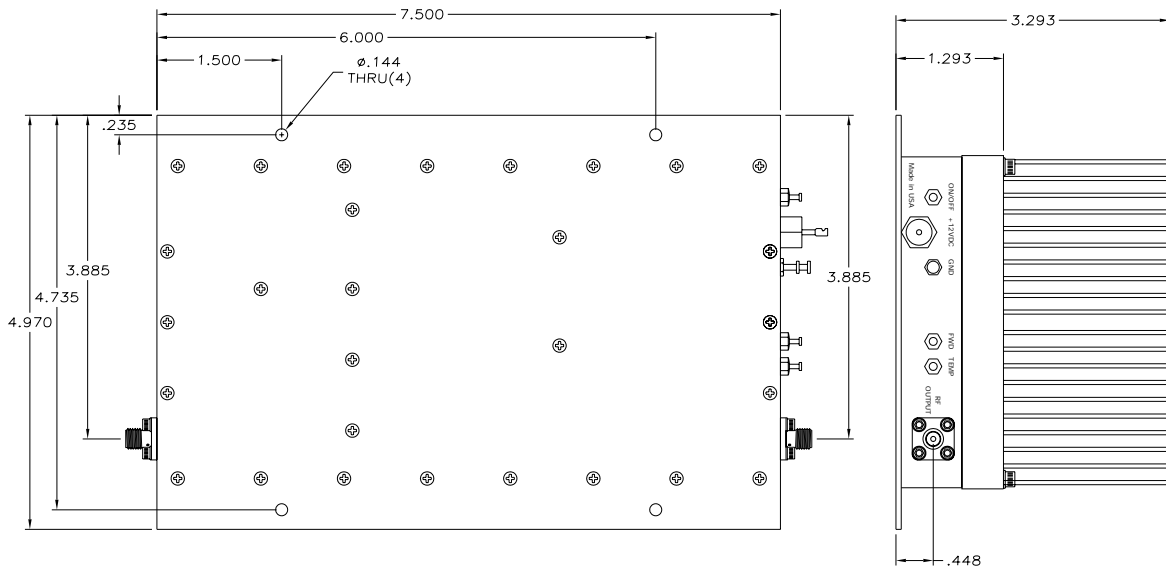


Parameter	Specification
Frequency Range	1.7 - 2.0 GHz
Pout (P1dB)	+ 50 dBm
Third Order Intercept Point	+ 60dBm
Linear Gain	50dB ± 1 dB
Gain Flatness over Full Band	± .5 dB
Input/Output Return Loss	-14 dB /-18 dB
DC Input Voltage	+ 12 Volts
DC Input Current	Approx 27 Amps @ P1dB
Mechanical Dimensions Without Heatsink	7.5 x 4.0 x 0.8 Inches
RF Connectors	SMA Female
Operating Temperature (Baseplate)	+20° C to +75° C
Operating Humidity	95% Non-condensing
Operating Altitude	Up to 10,000 feet above Sea Level

**DIMENSIONS IN INCHES**



**DIMENSIONS WITH HEATSINK**



<b>Pin</b>	<b>Description</b>	<b>Values</b>
RF IN	Input Connector (SMA Female)	2 dBm typical
RF OUT	Output Connector (SMA Female)	+50dBm @P1dB
GND	Ground Turret	---
FWD	Forward Power Detector	+ 50 dBm Output Power $\approx$ + 5.0 Volts
+12VDC	DC Input Voltage	+ 12 Volts @ 19 Amps (typ.)
I/O	TTL Logic On/Off	0 Volts = Off, 5 Volts = On

*Specifications subject to change without notice.*