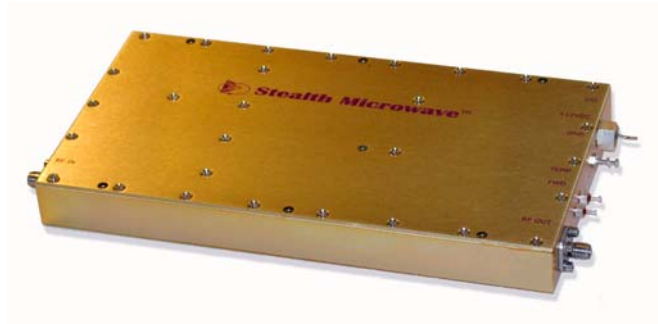


The **SM1720-50L** is a 1.7 to 2.0 GHz solid state GaAs amplifier designed for the Personal Communication Systems (PCS) market. Its compact size and ultra high linearity make it ideally suited for systems using CDMA, TDMA, or other high dynamic range multi-carrier applications. The amplifier is tuned in 100 MHz bands, provides a P1dB of +50 dBm and a Linear Gain of 57 dB. Our proprietary linearization technique improves the OIP3 by 6dB.



Features

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

Options

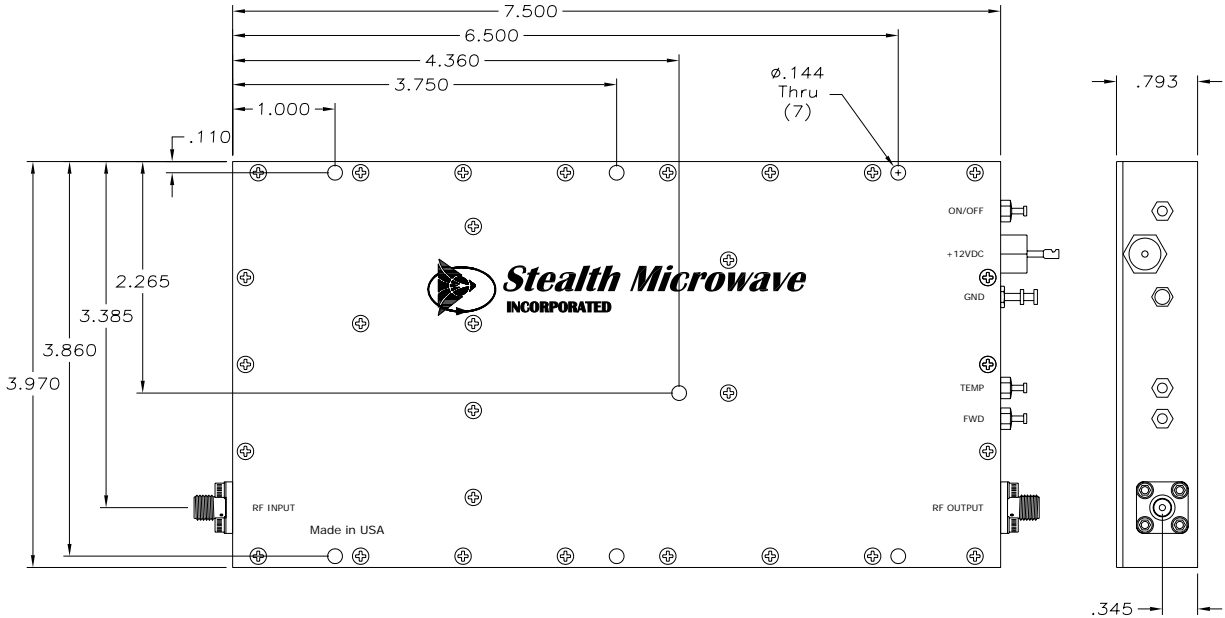
- Forward Power Detection
- Thermal Detector
- Logic On/Off Control
- Fan
- Modular Heatsink

Configurations

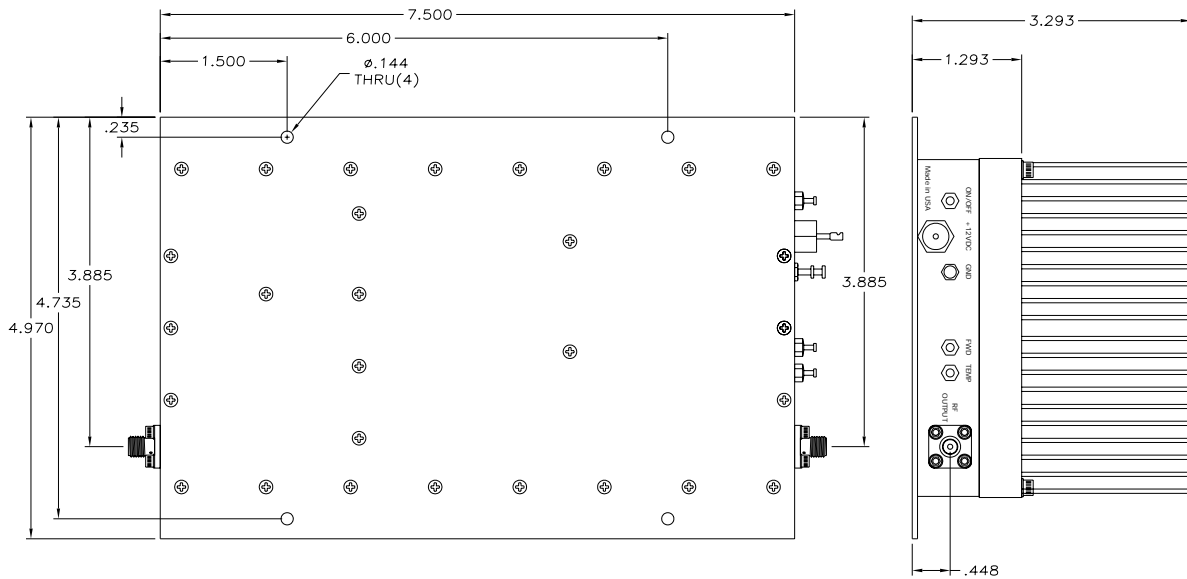
- Module
- Bench-Top-Lab Unit
- 19" Rack Mount Unit

Parameter	Specification
Frequency Range	100 MHz bands, ranging from 1.7 - 2.0 GHz
Pout (P1dB)	+ 50 dBm
Third Order Intercept Point	+ 66 dBm
Linear Gain	57 dB \pm 1 dB
Gain Flatness over Full Band	\pm .5 dB
Input/Output Return Loss	-14 / -16 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



Pin	Description	Values
RF IN	Input Connector (SMA Female)	-5 dBm typical
RF OUT	Output Connector (SMA Female)	+50dBm @P1dB
GND	Ground Turret	---
FWD	Forward Power Detector	+ 44 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.