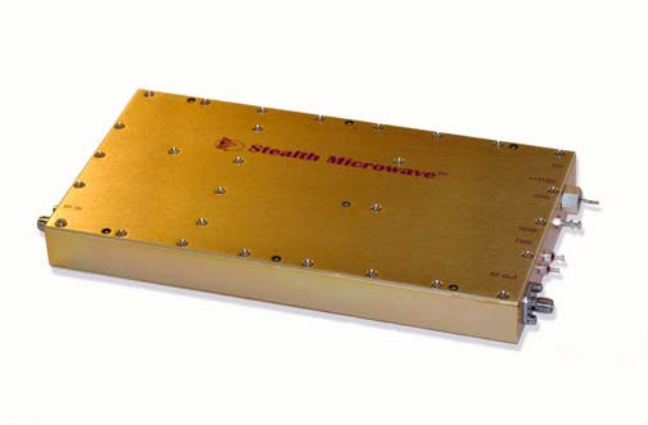
Stealth Microwave
INCORPORATED

Model SM1822-44

1800-2200 MHz
25 Watt Linear Power Amplifier
WIRELESS APPLICATIONS

Stealth Microwave's **SM1822-44** is a 1.80 to 2.2 GHz solid state GaAs amplifier designed for the various wireless markets. Its compact size and high linearity make it ideally suited for systems using CDMA, OFDM, TD-CDMA, WCDMA, and WiMAX standards. The amplifier provides +44 dBm of output power at P1dB, 45 dBm of Linear Gain, and an OIP3 of +55 dBm.



Features

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

Options

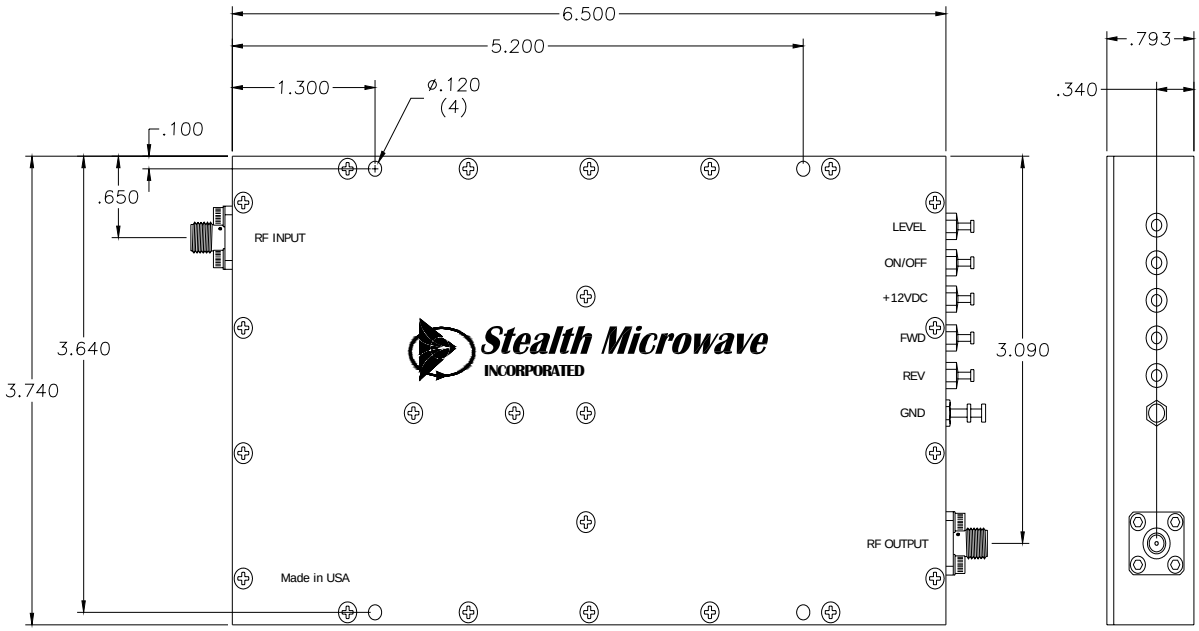
- Forward/Reverse Power Detection
- Level Control
- Logic On/Off Control
- Integral Heatsink

Configurations

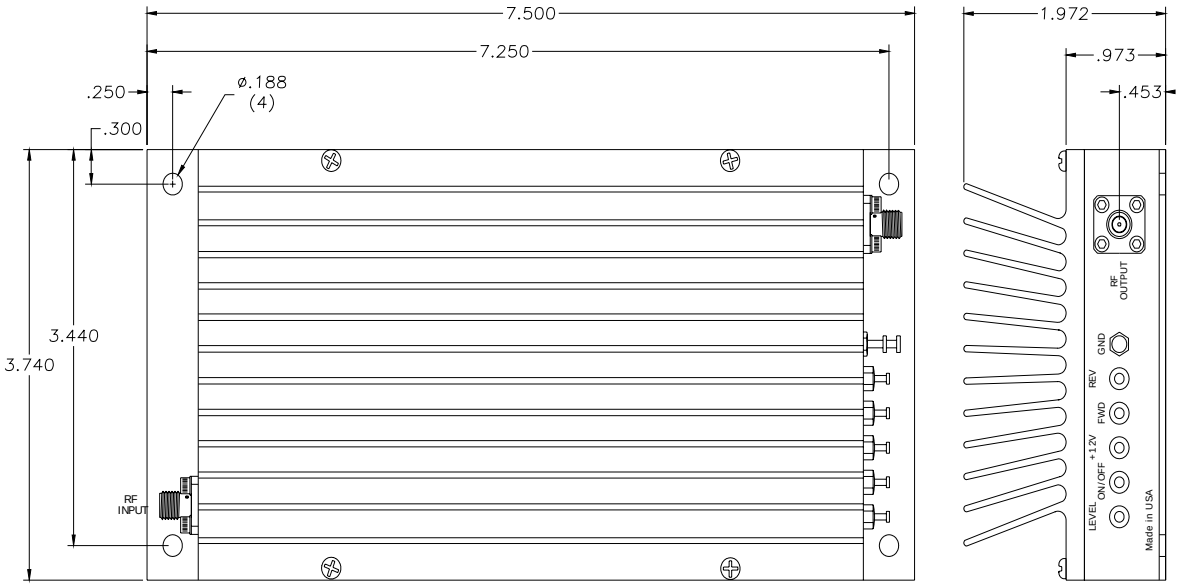
- Module
- Bench-Top-Lab Unit
- 19" Rack

Parameter	Specification
Frequency Range	1.80 – 2.20 GHz
Pout (P1dB)	+ 44 dBm (typ.)
Third Order Intercept Point	+ 55 dBm
Linear Gain	45 dB ± 1 dB
Gain Flatness over Full Band	± .5 dB
Input/Output Return Loss	-14 dB /-14dB
DC Supply	+ 12 Volts @ 6.9 Amps.
Level Control	20 dB (min.)
Mechanical Dimensions	7.5 x 3.74 x 2.0 Inches
RF Connectors	SMA Female
Operating Temperature	-20ºC to +85ºC
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)	0 dBm, typical
RF Output	Output Connector (SMA Female)	+ 44 dBm @ P1dB
GND	Ground Turret	---
REV	Reverse Power Detector	∞ VSWR @ + 44 dBm ≈ + 5 Volts
FWD	Forward Power Detector	+ 44 dBm Output Power ≈ + 5 Volts
+12VDC	DC Input Voltage	+ 12 Volts @ 6.9 Amps
On/Off	TTL Logic On/Off	0 Volts = Off, + 5 Volts = On
Level	Voltage Variable Attenuator (VVA)	0 Volts = 0 dBr, + 5 Volts ≥ - 20 dBr