

The **SM1822-42LS** is a 1.8 to 2.2 GHz solid state GaAs FET amplifier designed for demanding applications where bandwidth and power are required in a small package. The amplifier provides 52 dB of linear gain with a P1dB of +42 dBm. Our proprietary pre-distortion technique provides enough linearity for approx. 3 Watts of COFDM output at >40dBc ACP.



### Features

- Integrated Linearizer
- Single Power Supply
- Thermal Protection with Auto Reset

### Options

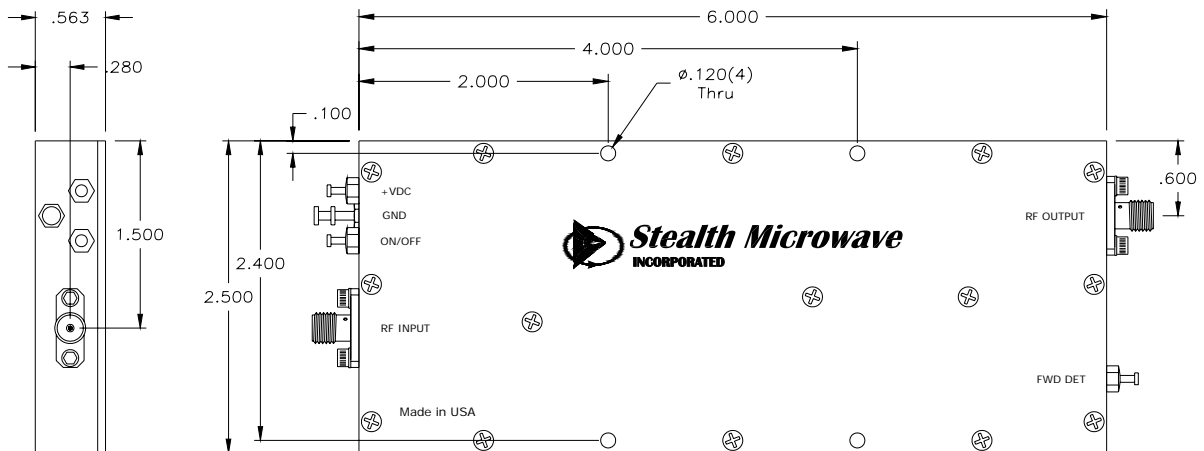
- Forward Power Detection
- Logic On/Off Control
- Integral Heatsink

### Configurations

- Module (Standard)
- Bench-Top-Lab Unit
- 19" Rack Mount

Parameter	Specification
Frequency Range	1.8 – 2.2 GHz
Pout (P1dB)	+42 dBm (typ.)
Third Order Intercept Point	+58 dBm
Linear Gain	52 dB ± 1 dB
Gain Flatness (over full band)	± .5 dB
Gain Change (over temperature)	± .5 dB
Input/Output Return Loss	-11 / -14 dB
DC Input Voltage	+12 Volts
DC Input Current	5.5 Amperes (operational)
Mechanical Dimensions	6.0 x 2.5 x .56 inches
RF Connectors	SMA Female
Operating Temperature (Baseplate)	-10° to +80°C
Operating Humidity	95% Non-condensing
Operating Altitude	Up to 10,000 feet above Sea Level

**DIMENSIONS IN INCHES**



Pin	Description	Values
RF INPUT	Input Connector ( SMA Female )	-8 dBm (max.)
RF OUTPUT	Output Connector (SMA Female)	+ 42 dBm @ P1dB (typ.)
GND	Ground Turret	---
FWD	Forward Power Detector	+ 35dBm COFDM Output Power $\approx$ + 2.0 Volts.
+12VDC	DC Input Voltage	+ 12 Volts @ 5.5 Amperes. (operational)
ON/OFF	TTL Logic On/Off	0 Volts = Off, + 5 Volts = On

*Specifications subject to change without notice.*