

The **SM0822-39** is a solid state GaAs amplifier designed for multi-purpose use in the wireless markets. **With 1.4 GHz of bandwidth**, this small amplifier can be used in most wireless applications. This module provides 45 dB of linear gain, +39 dBm of output power at P1dB, and an OIP3 of +53 dBm.



**Features**

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

**Options**

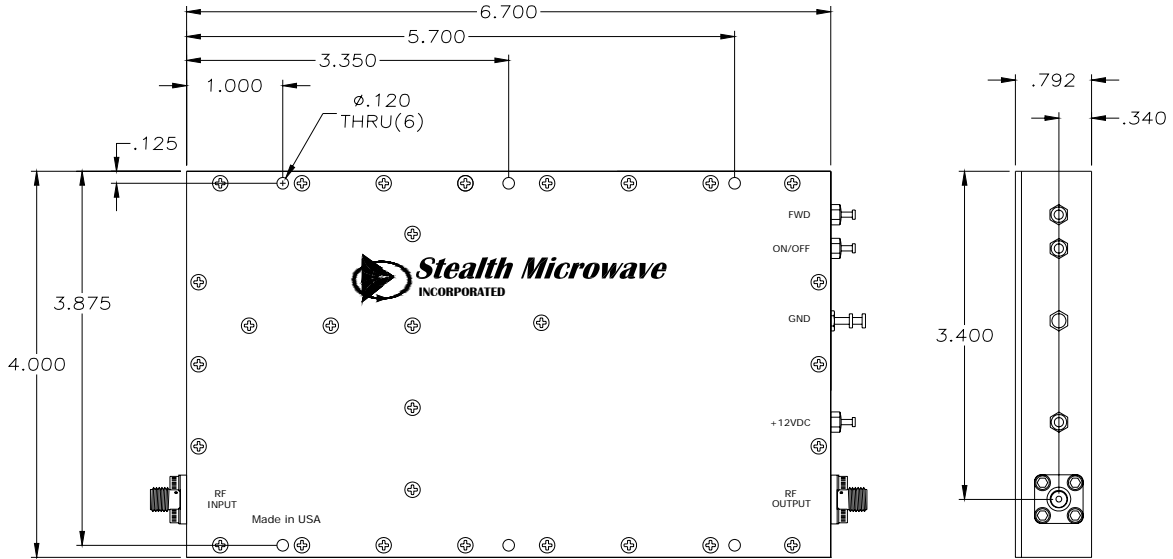
- Forward Power Detection
- Logic On/Off
- Fan
- Pulse Control for TDD applications with <math>< \mu\text{s}</math> rise/fall time
- Integral Heatsink

**Configurations**

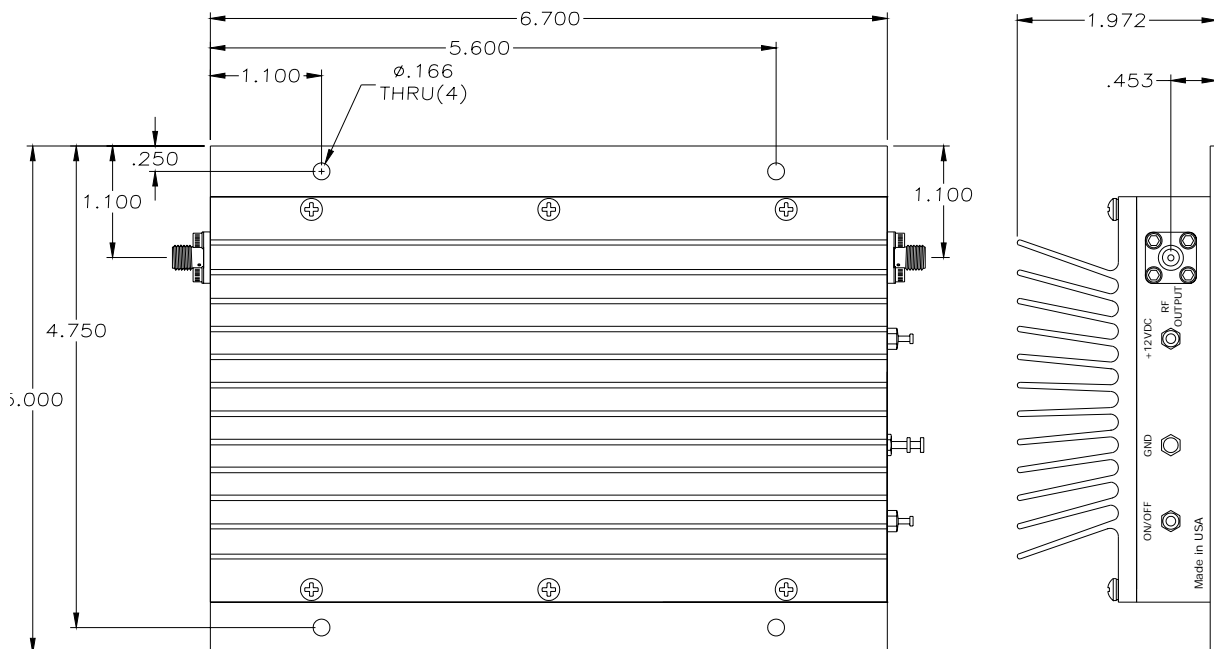
- Module
- Laboratory Unit
- 19" Rack

Parameter	Specification
Frequency Range	800 – 2200 MHz
Pout (P1dB)	+ 39 dBm
Third Order Intercept Point	+ 53 dBm (min.)
Linear Gain	45 dB $\pm$ 1 dB
Gain Slope over Full Band	$\pm$ .75 dB
Gain Change over Temperature	$\pm$ .5 dB
Input/Output Return Loss	-16 dB / -11 dB
DC Supply, Operating	+ 12 Volts @ 3.5 Amperes
Mechanical Dimensions w/o heatsink	6.7 x 4.0 x .8 in.
RF Connectors	SMA Female
Operating Temperature (Baseplate)	0°C to +55°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 Input	Input Connector (SMA Female)	- 4 dBm, typical
RF OUT	Output Connector (SMA Female)	+39 dBm @P1dB
FWD	Forward Power Detection	3.00 ± .01 V across band @ +34dBm Pout
GND	Ground Turret	---
+12VDC	DC Input Voltage	+ 12 Volts @ 3.5 Amperes
I/O	On/Off	TTL, +5V = on, 0V = off

*Specifications subject to change without notice.*