

The **SM1727-37** is a solid state GaAs amplifier designed primarily for multiple wireless markets. With **1 GHz of instantaneous bandwidth**, the amplifier can be used in most wireless applications. This amplifier operates from 1700-2700 MHz, provides 33 dB of gain, ± 0.5 dB gain flatness over the full band, and +37 dBm of output power at the 1 dB compression point. This highly linear design provides an output third order intercept point of + 50 dBm. The amplifier operates off a single supply of +12V and 1.9 A typical. The unit uses the latest surface mount technologies to provide numerous features, while maintaining a very small size.

Features

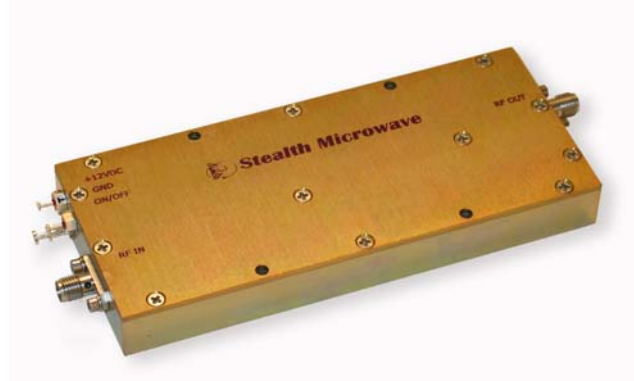
- +12 VDC Operation
- Over Voltage Protection
- Thermal Protection with Auto Reset

Options

- Logic On/Off Control
- Integral Heatsink

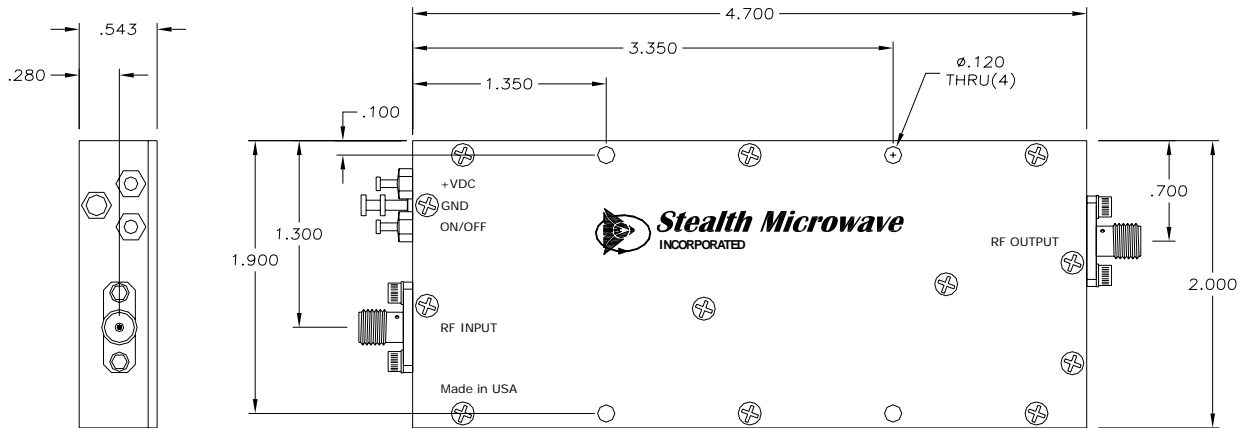
Configurations

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

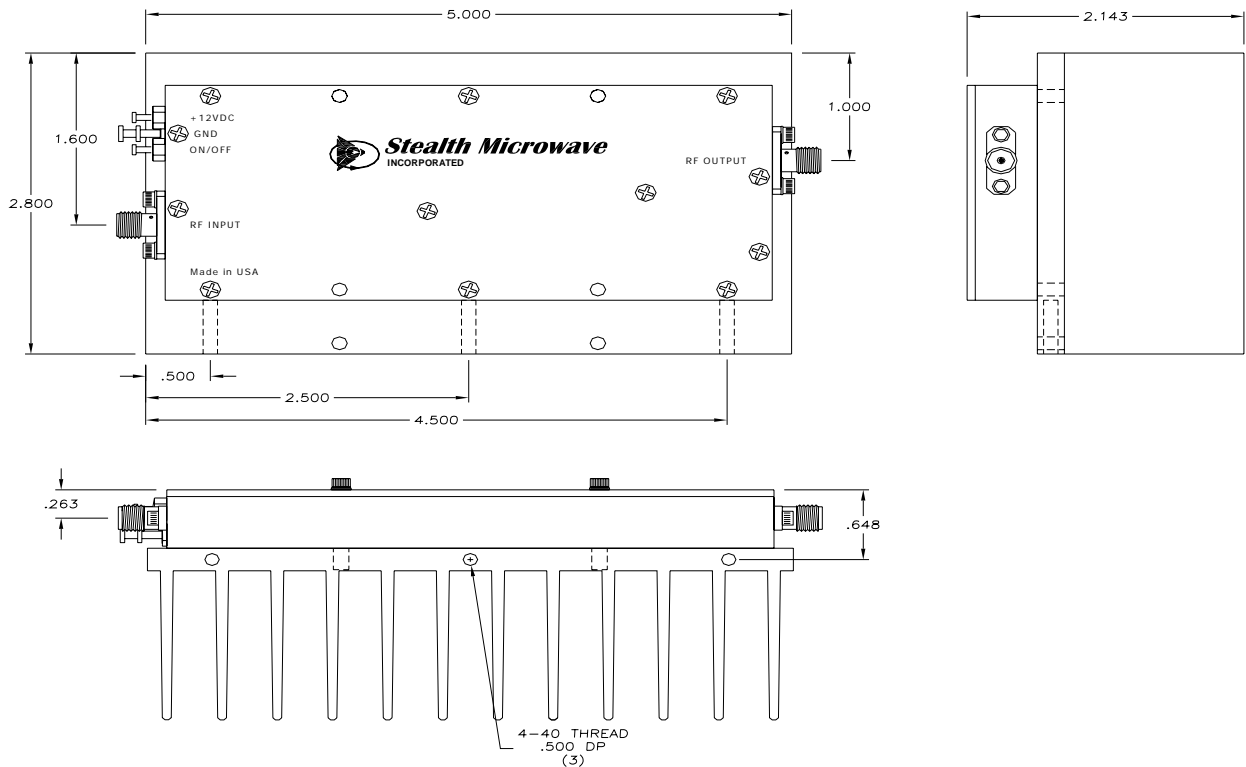


Parameter	Specification
Frequency Range	1.7 – 2.7 GHz
Pout (P1dB)	+ 37 dBm (typ.)
Third Order Intercept Point	+ 50 dBm (typ.)
Linear Gain	33 dB \pm 1.0 dB
Gain Flatness over Full Band	\pm .5 dB
Input/Output Return Loss	-16 dB/ -16 dB
DC Input Voltage	+12 Volts
DC Input Current	1.9 Amperes (typ.) 2.1 Amperes (max.)
Mechanical Dimensions (Without Heatsink)	4.7 x 2.0 x .54 inches
RF Connectors	SMA Female
Operating Temperature (Baseplate)	-20°C to +65°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 Output	Output Connector SMA (Female)	+ 37 dBm @ P1dB
GND	Ground Turret	---
+12 VDC	DC Input Voltage	+ 12 Volts @ 1.9 Amperes
On/Off	TTL Logic On/Off	0 Volts = Off, +5 Volts = On