

Model SM1727-37HS

1700-2700 MHz 5 Watt Linear Power Amplifier FOR LAB & WIDEBAND APPLICATIONS

The SM1727-37HS 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 (+10V available as an option) 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

- Single DC Supply of +10V
- Logic On/Off Control
- Integral Heatsink

Configurations

- Module
- Laboratory Unit
- 19" Rack



Parameter	Specification
Frequency Range	1.7 – 2.7 GHz*
Pout (P1dB)	+ 37 dBm
Third Order Intercept Point	+ 50 dBm (typ.)*
Linear Gain	$33 \text{ dB} \pm 1.0 \text{ dB*}$
Gain Flatness over Full Band	±.5 dB*
Input/Output Return Loss	-16 dB*/ -14 dB
DC Input Voltage	+12 Volts* (+10 V Operation Available)
DC Input Current	1.9 Amperes (typ.)2.1 Amperes (max.)
Mechanical Dimensions	4.7 x 2.0 x .54 inches
RF Connectors	SMA Female
Operating Temperature	0°C to +55°C
Operating Humidity	95% Non-condensing
Operating Altitude	Up to 10,000 feet above Sea Level

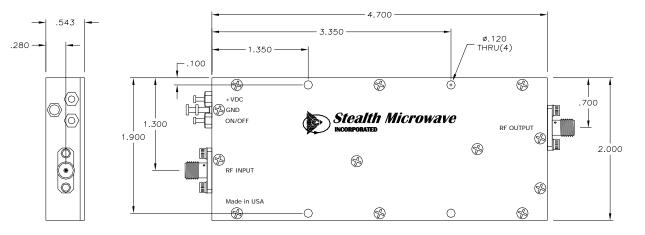
* Parameter can be modified to meet specific needs. Call our sales office for more information.



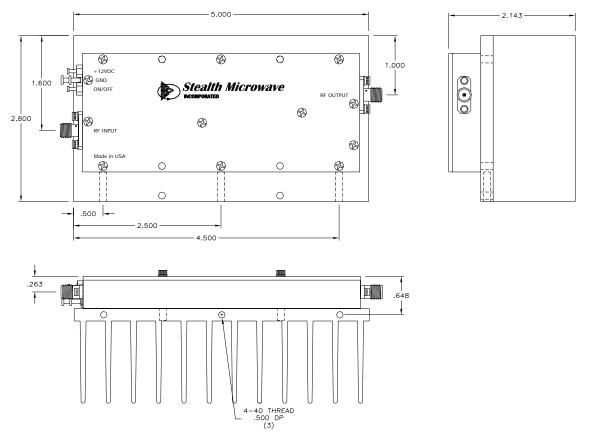
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DIMENSIONS IN INCHES



HEATSINK OPTION





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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

Specifications subject to change without notice.