

The **SM3134-47L** is a 3.1 to 3.4 GHz solid state GaAs FET amplifier designed for the Broadband Wireless Access market. The amplifier provides 56 dB of linear gain and +47 dBm of output power at P1dB. Our proprietary linearization technique improves the OIP3 by 3 dB. The design provides ultra-linear performance for rigorous system requirements.

Features

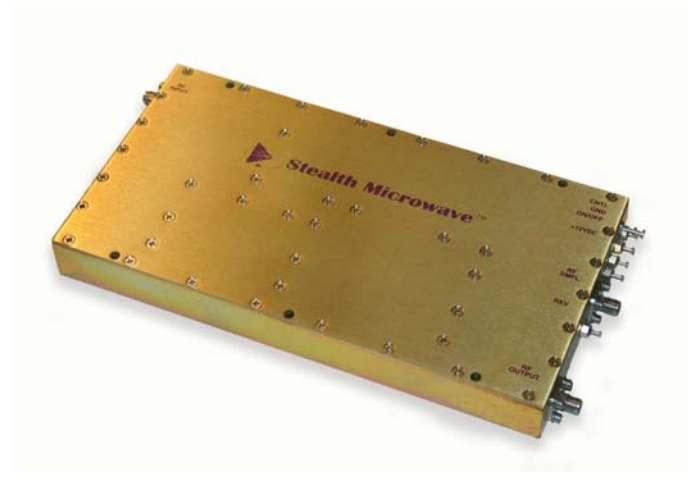
- Mis-Match Protected
- Single Power Supply
- Over Voltage Protection
- Thermal Protection with Auto Reset
- Temperature Compensation
- Integral Output Isolator

Options

- Forward/Reverse Power Detection
- RF Sampling
- Pulse Control up to 1 μ s for TDD with RF Isolation
- Logic On/Off Control
- Integral Heatsink

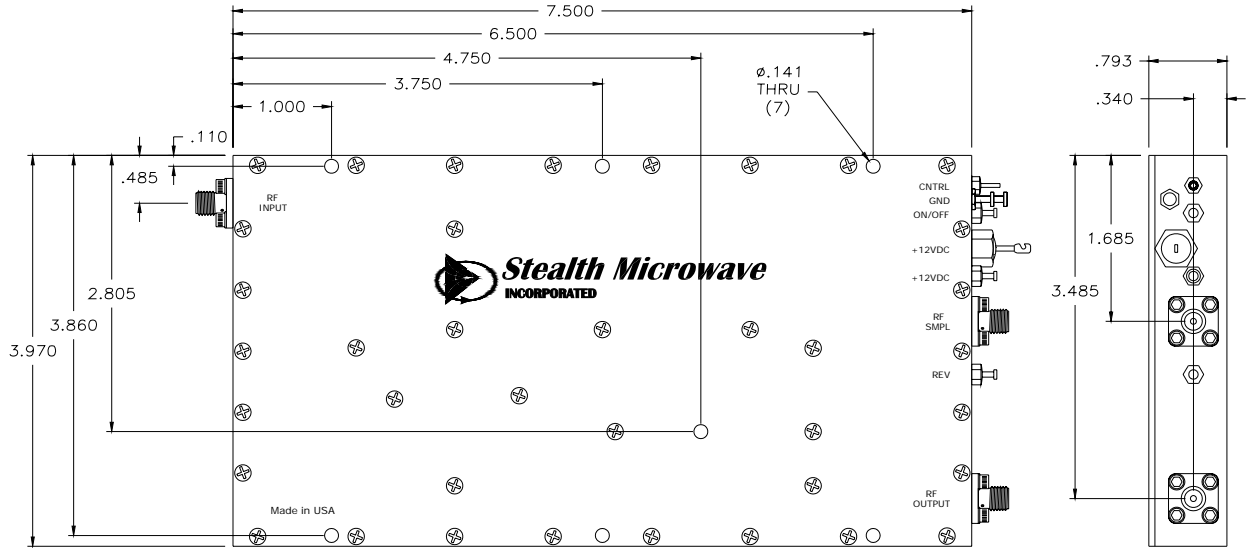
Configurations

- Module
- 19" Rack
- Bench Top lab Unit

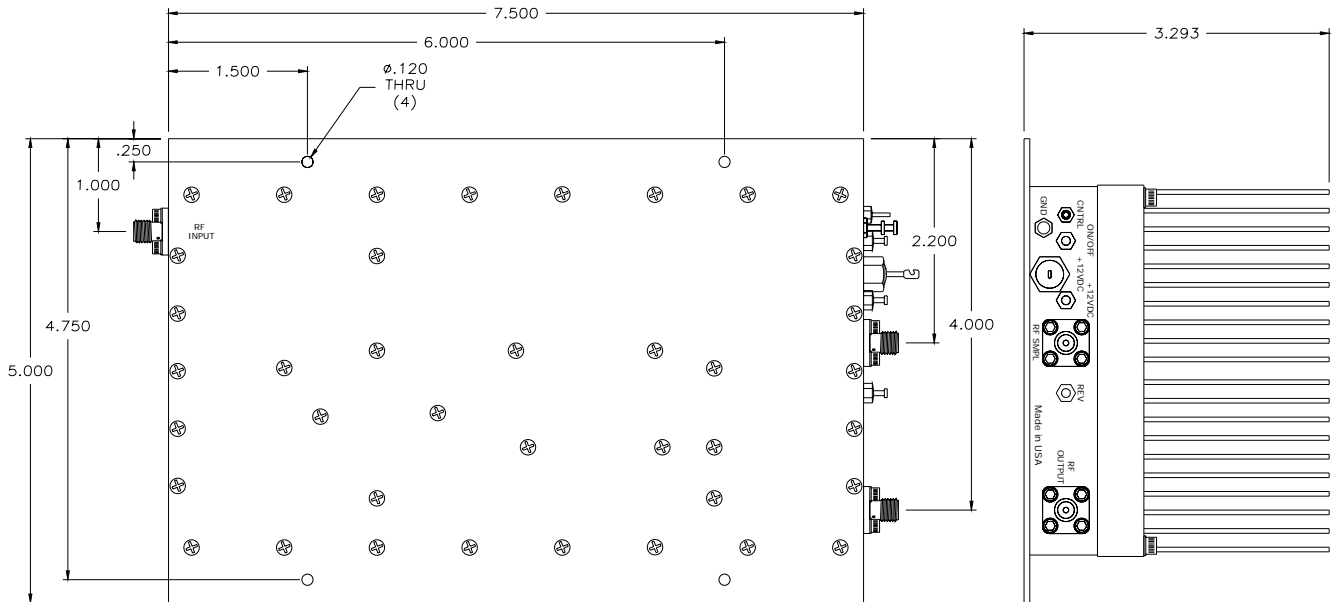


Parameter	Specification
Frequency Range	3.1 – 3.4 GHz
Pout (P1dB)	+ 47 dBm (min @ band edges)
Pout OFDM	+36 dBm with 45 dBc spectral regrowth.
Linear Gain	55 dB \pm 1 dB
Gain Flatness over Full Band	\pm .5 dB
Gain Change over Temperature	\pm .5 dB
Input/Output Return Loss	-14 dB /-18 dB (Output isolator available)
Power Supply	+ 12 Volts @ 15 Amps at P1dB, 9 Amps at +36 dBm (Varies per application)
Mechanical Dimensions (Without Heatsink)	7.5 x 4.0 x .79 inches
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



HEATSINK OPTION



Pin	Description	Values
RF IN	Input Connector (SMA Female)	- 6 dBm, typical
RF OUT	Output Connector (SMA Female)	+47 dBm @P1dB
RF SAMPLE	Sample RF Port (SMA Female)	30 dBr
GND	Ground Turret	---
REV	Reverse Power Detector	∞ VSWR @ + 41 dBm \approx + 3.0 Volts
FWD	Forward Power Detector	+ 41 dBm Output Power \approx + 2.5 Volts
+12V	DC Input Voltage	+ 12 Volts @ 15 Amperes (typ.)
I/O	TTL Logic On/Off	0 Volts = Off, + 5 Volts = On
CNTL	Pulse Control	Switching Speed up to 100 kHz
THML ALRM	Thermal Alarm (Over Temperature)	0 Volts = No alarm, + 5 Volts = Alarm

Specifications subject to change without notice.