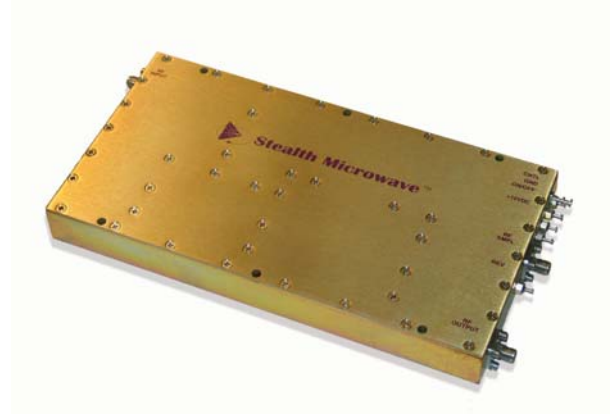


The **SM4450-41L** is a 4.4 to 5.0 GHz solid state GaAs FET amplifier designed for various commercial and military applications. The amplifier provides 55 dB of linear gain with a P1dB of +41 dBm. Our proprietary pre-distortion technique improves the OIP3 by more than 4 dB. The unit provides ultra-linear performance for rigorous system requirements. It is available in modular form (standard), as a lab unit or in 19" rack mountable form.



Features

- Integrated Linearizer
- Single Power Supply
- Over Voltage Protection
- Thermal Protection with Auto Reset
- Temperature Compensation

Options

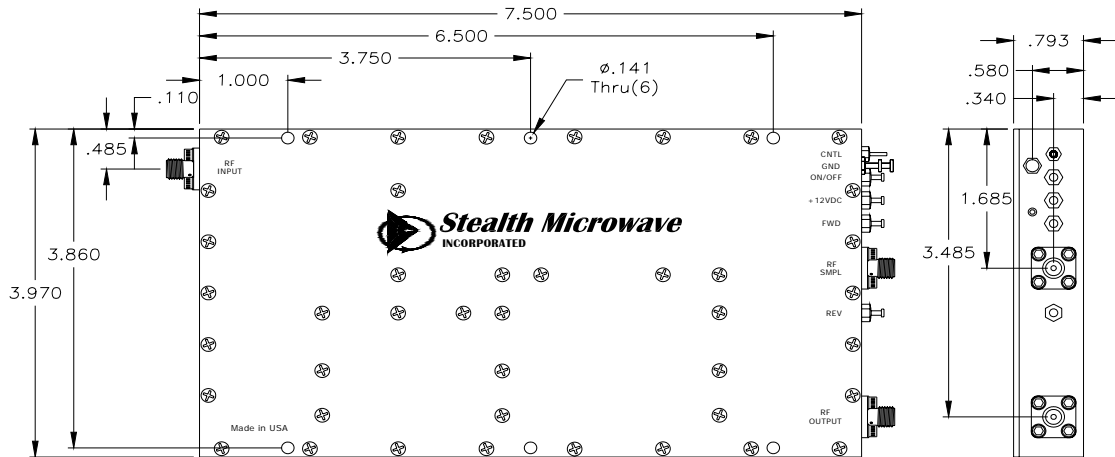
- Forward/Reverse Power Detection
- RF Sample Port
- High Speed Switching with a 1 us rise/fall time
- TTL On/Off Control
- Integral Heatsink

Configurations

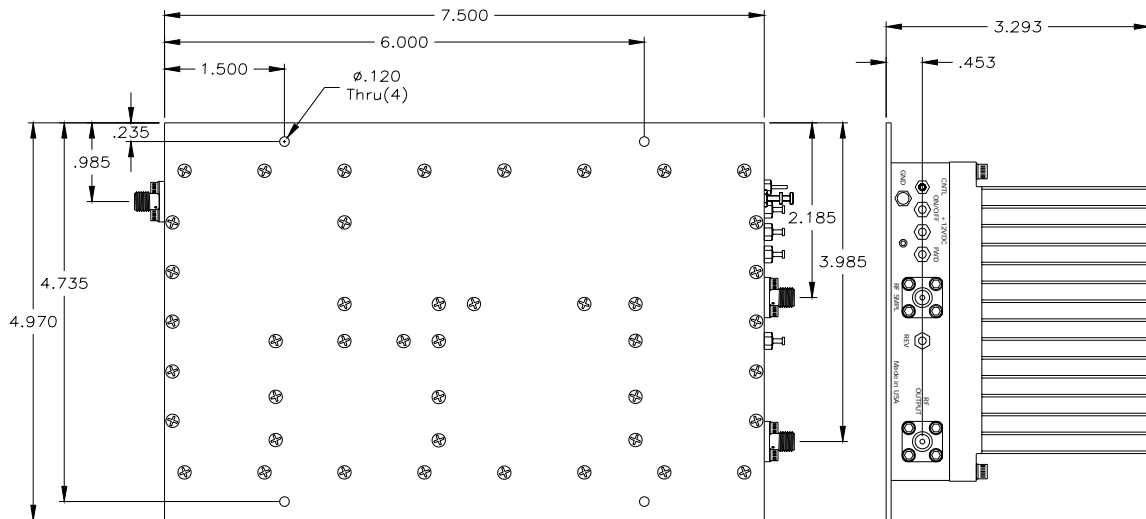
- Module (Standard)
- Laboratory Unit
- 19" Rack Mount

Parameter	Specification
Frequency Range	4.40 – 5.00 GHz
Pout (P1dB)	+41 dBm (typ.)
Output Third Order Intercept Point (OIP3)	+54 dBm (typ.)
Linear Gain	55 dB \pm 1 dB
Gain Flatness (over full band)	\pm .75 dB
Gain Change (over temperature)	\pm .5 dB
Input/Output Return Loss	-16 dB / -16dB
DC Input Voltage	+12 Volts
DC Input Current (operating)	5.0 Amperes
Mechanical Dimensions	7.50 x 3.97 x .79 inches without heatsink
RF Connectors	SMA Female
Operating Temperature	-20° to +85°C Baseplate
Operating Humidity	95% Non-condensing
Operating Altitude	Up to 10,000 feet above Sea Level

DIMENSIONS IN INCHES



HEATSINK OPTION



Pin	Description	Values
RF INPUT	Input Connector (SMA Female)	- 13 dBm (max.)
RF OUTPUT	Output Connector (SMA Female)	+ 41 dBm @ P1dB (typ.)
RF SAMPLE	RF Sample Port (SMA Female)	30 dB
GND	Ground Turret	---
FWD	Forward Power Detector	+ 37 dBm Output Power \approx + 2.5 Volts
REV	Reverse Power Detector	∞ VSWR @ + 37 dBm \approx + 2.5 Volts
+12VDC	DC Input Voltage	+ 12 Volts
ON/OFF	TTL Logic On/Off	0 Volts = Off, + 5 Volts = On
CNTL	High Speed Switching	0 Volts = Off + 5 Volts = On

Specifications subject to change without notice.