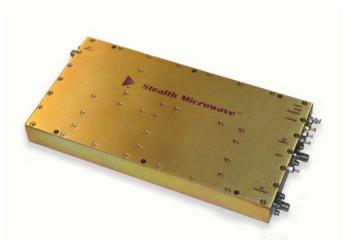


# Model SM2025-46L

2000-2500 MHz 50 Watt Linear Power Amplifier FOR DVB APPLICATIONS

Stealth Microwave's **SM2025-46L** is a solid state GaAs FET amplifier designed for the Digital Video Broadcasting market. Using a proprietary pre-distortion technique, the OIP3 is improved by 7 dB. The P1dB is +46 dBm, the linear gain is 55 dB, and the gain change over temperature is only  $\pm$  0.5 dB. The unit is available is modular form (standard), or as a rack mountable amplifier.



#### **Features**

- Single Power Supply
- Over/Reverse Voltage Protection
- Thermal Protection with Auto Reset
- Temperature Compensation
- Integral Output Isolator

### **Options**

- Forward/Reverse Power Detection
- Low Pass Filter
- RF Sampling
- Logic On/Off Control
- Integral Heatsink
- High Speed Switching for TDD
- Internal AGC (40 dBr)

#### **Configurations**

- Module
- Laboratory Unit
- 19" Rack

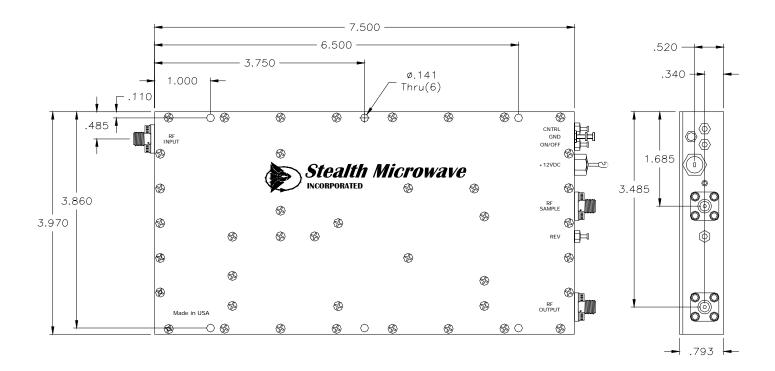
Parameter	Specification
Frequency Range	2.0 - 2.5 GHz
Pout (P1dB)	+45.7 dBm (min.) +46.3 dBm (typ.)
Third Order Intercept Point	+ 64 dBm
Linear Gain	$52 \text{ dB} \pm 1 \text{ dB}$
Gain Flatness over Full Band	± .75 dB
Gain Change over Temperature	± .5 dB
Input/Output Return Loss	-14/-15 dB (Output Isolator)
DC Input Voltage	+ 12 Volts
DC Input Current	15 Amps (Varies per application)
Mechanical Dimensions	7.5 x 4.0 x .79 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



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## **DIMENSIONS IN INCHES**



Pin	Description	Values
RF INPUT	Input Connector (SMA Female)	- 7 dBm, typical
<b>RF OUTPUT</b>	Output Connector (SMA Female)	+46.3 dBm @ P1dB (typ.)
<b>RF SAMPLE</b>	Sample RF Port (SMA Female)	30 dBr
GND	Ground Turret	
REV	Reverse Power Detector	$\infty$ VSWR @ + 41 dBm $\approx$ + 3.0 Volts <sup>1</sup>
FWD	Forward Power Detector	+ 41 dBm Output Power $\approx$ + 2.5 Volts <sup>1</sup>
+12VDC	DC Input Voltage	+ 12 Volts @ 15 Amps (typ.)
ON/OFF	TTL Logic On/Off	0 Volts = Off, + 5 Volts = On

Specifications subject to change without notice.

<sup>1</sup>May be set according to customer required values.