

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

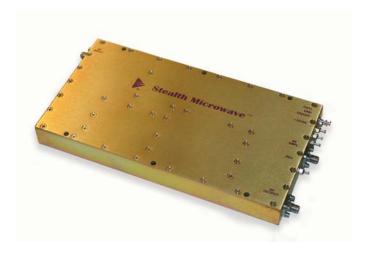
- Single Power Supply
- Over/Reverse Voltage Protection
- Thermal Protection with Auto Reset
- Temperature Compensation
- Integral Output Isolator

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		
1 ai ainetei	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	$52 dB \pm 1 dB$	
Gain Flatness over Full Band	± .75 dB	
Gain Change over	± .5 dB	
Temperature	14/15 ID (O 4 = 4 I = 1 - 4 = 2)	
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	

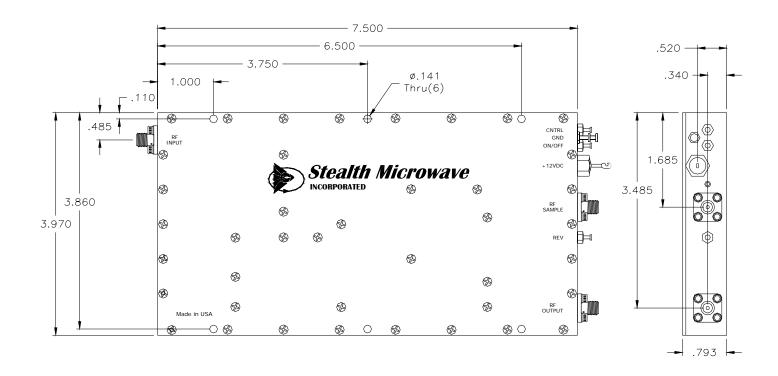
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DIMENSIONS IN INCHES



Pin	Description	Values
RF INPUT	Input Connector (SMA Female)	- 7 dBm, typical
RF OUTPUT	Output Connector (SMA Female)	+46.3 dBm @ P1dB (typ.)
RF SAMPLE	Sample RF Port (SMA Female)	30 dBr
GND	Ground Turret	
REV	Reverse Power Detector	∞ VSWR @ +41 dBm \approx +3.0 Volts ¹
FWD	Forward Power Detector	+ 41 dBm Output Power \approx + 2.5 Volts ¹
+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.

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¹May be set according to customer required values.