Stealth Microwave
INCORPORATED

Model SM2025-41LS

2000 - 2500 MHz
12 Watt Ultra-Linear Power Amplifier
FOR BROADCAST APPLICATIONS

The **SM2025-41LS** is a 2.0 to 2.5 GHz solid state GaAs FET amplifier designed for demanding applications such as digital video transmission. The amplifier provides 51.5 dB of linear gain with a P1dB of +41 dBm. Our proprietary pre-distortion technique provides enough linearity for approx. 2.2 Watts of COFDM output at >40dBc ACP. It is available in modular form (standard), as a lab unit or in 19" rack mountable form.

Features

- Integrated Linearizer
- Single Power Supply
- Thermal Protection with Auto Reset

Options

- Forward Power Detection
- Logic On/Off Control
- Integral Heatsink

Configurations

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

Parameter	Specification
Frequency Range	2.0 – 2.5 GHz
Pout (P1dB)	+41 dBm (typ.)
Pout (Linear)	+33.5 dBm [1]
Output Third Order Intercept Point (OIP3)	+59.5 dBm
Linear Gain	51.5 dB
Gain Flatness (over full band)	± .5 dB
Gain Change (over temperature)	± .5 dB
VSWR (Input/Output)	1.8:1 / 1.5:1
DC Input Voltage	+12 Volts
DC Input Current	4.0 Amperes (operational)
Mechanical Dimensions	6.0 x 2.5 x .56 inches
RF Connectors	SMA Female
Operating Temperature	-10º to +60ºC [2]
Operating Humidity	95% Non-condensing
Operating Altitude	Up to 10,000 feet above Sea Level

1 Input signal is 7.68 MHz wide with a 9.49 dB peak to average. The test measurement is in a 10 MHz bandwidth, offset by 10 MHz, with an ACP of 40 dBc.

2 -30 ^{o} C is TBD

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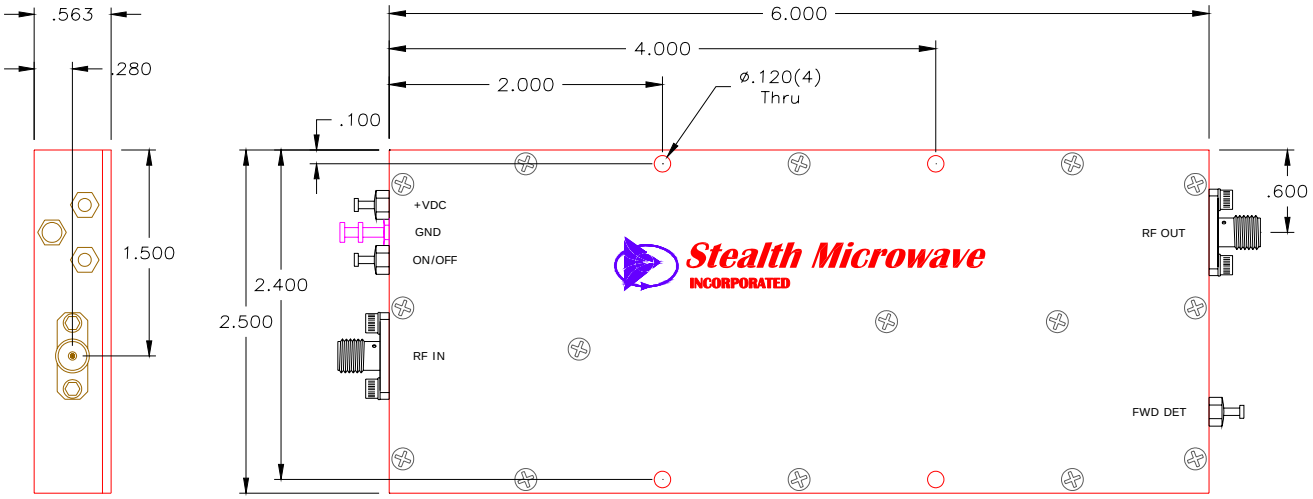
DIMENSIONS IN INCHES



Pin	Description	Values
RF INPUT	Input Connector (SMA Female)	-8 dBm (max.)
RF OUTPUT	Output Connector (SMA Female)	+ 41 dBm @ P1dB (typ.)
GND	Ground Turret	---
FWD	Forward Power Detector	+ 33.5dBm COFDM Output Power ≈ + 2.0 Volts. Flatness across the band is ± .4 dB looking into a 50 Ω load, example – Weinschel WA49-10-43, 10 dB attenuator, followed by an HP Power Sensor, #8481B.
+12VDC	DC Input Voltage	+ 12 Volts @ 4.0 Amperes. (operational)
ON/OFF	TTL Logic On/Off	0 Volts = Off, + 5 Volts = On

Specifications subject to change without notice.

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