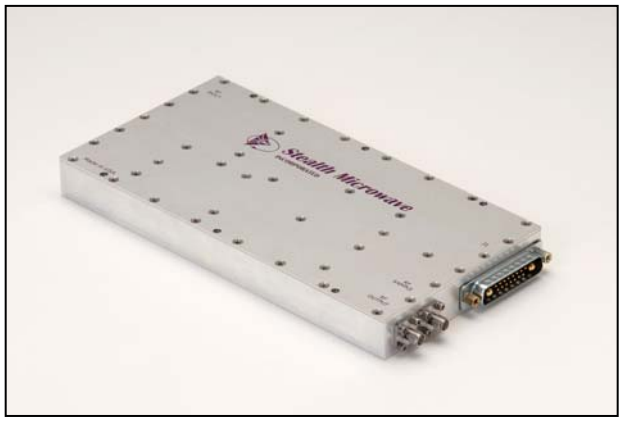
Stealth Microwave
INCORPORATED

Lead Free
RoHs Compliant

Model SM7985-43

7900-8500 MHz
20 Watt Linear Power Amplifier
FOR COFDM APPLICATIONS

The **SM7177-43** is a 7.9 to 8.5 GHz solid state GaAs FET amplifier. The amplifier provides 58 dB of linear gain with a P1dB of +43 dBm. It is available in modular form (standard), as a lab unit or in a 19" rack mount form.



Features

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

Options

- Forward/Reverse Power Detection
- RF Sampling Port
- Fan
- Pulse Control for TDD applications with speeds up to 800 nsec rise/fall time
- Logic On/Off Control
- Integral Heatsink

Configurations

- Module
- Laboratory Unit
- 19" Rack Mount

Parameter	Specification
Frequency Range	7.900 – 8.500 GHz
Pout (P1dB)	+43 dBm
Output Third Order Intercept Point (OIP3)	+54 dBm
Linear Gain	58 dB ± 1 dB
Gain Flatness (over full band)	± .75 dB
Gain Change (over temperature)	± .5 dB
Input/Output Return Loss	-16 dB / -16dB
DC Input Voltage	+12 Volts
DC Input Current	9.2 Amperes (operational)
Mechanical Dimensions (Without Heatsink)	7.50 x 3.97 x .79 inches
RF Connectors	SMA Female
Operating Temperature (Baseplate)	-20ºC to +85ºC
Operating Humidity	95% Non-condensing
Operating Altitude	Up to 10,000 feet above Sea Level

1007 Whitehead Road Ext., Trenton, NJ 08638
Tel: (609) 538-8586 ♦ Fax: (609) 538-8587
Email: sales@stealthmicrowave.com ♦ Web site: www.stealthmicrowave.com

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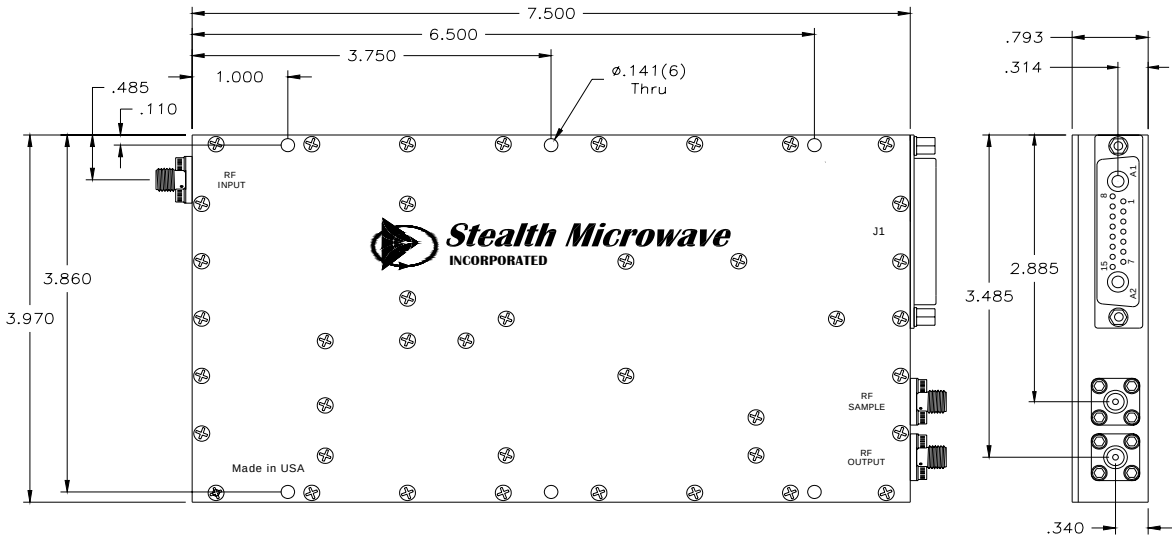
DIMENSIONS IN INCHES



Pin	Description	Values
RF INPUT	Input Connector (SMA Female)	- 17 dBm (typ.)
RF OUTPUT	Output Connector (SMA Female)	+ 43 dBm min @ P1dB
RF SAMPLE	RF Sample Port (SMA Female)	30 dBr
GND	Ground Turret	---
FWD	Forward Power Detector	+ 39 dBm Output Power ≈ + 5.0 Volts
REV	Reverse Power Detector	∞ VSWR @ + 39 dBm ≈ + 4.0 Volts
+12VDC	DC Input Voltage	+ 12 Volts @ 9.2 Amperes. (operational)
ON/OFF	TTL Logic On/Off	0 Volts = Off, + 5 Volts = On
CNTL	TTL Pulse Control	Rates < 800 nsec

Specifications subject to change without notice.

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