

The **SM3338-43** is a 3.3 to 3.8 GHz solid state GaAs FET amplifier designed for WiMAX applications. The amplifier provides 50 dB of linear gain with a P1dB of +43 dBm. The unit is designed for WiMAX BTS products that require 802.16 EVM and spectral mask compliance. It is available in modular form (standard), or in 19" rack mountable form.

Features

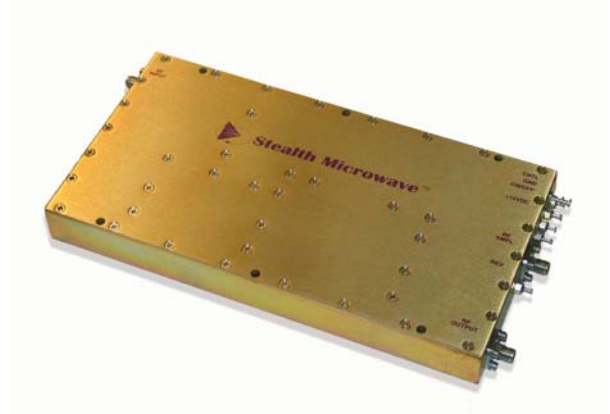
- Over Voltage Protection
- Thermal Protection with Auto Reset
- Temperature Compensation

Options

- Forward/Reverse Power Detection
- High Speed switching with 1us rise/fall time
- TTL On/Off Control
- Integral Heatsink
- Cooling Fan

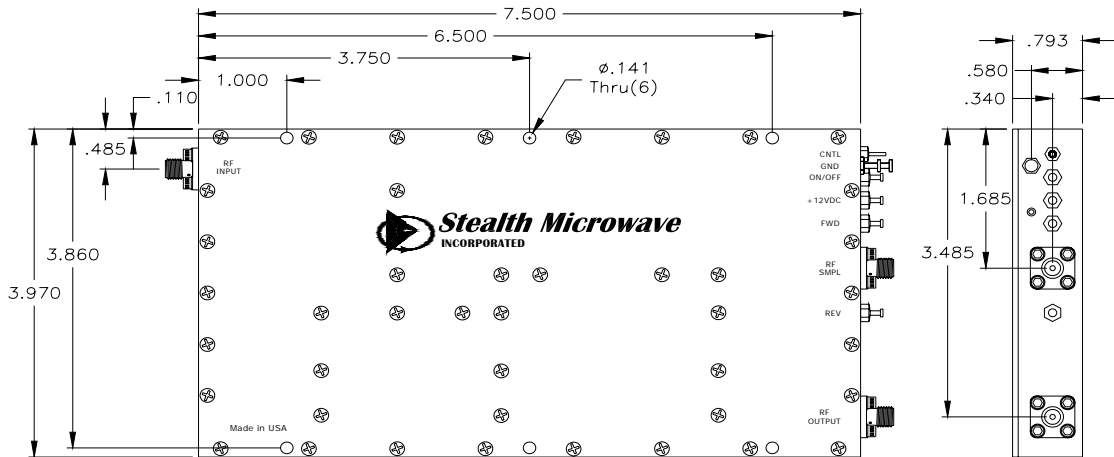
Configurations

- Module
- 19" Rack Mount

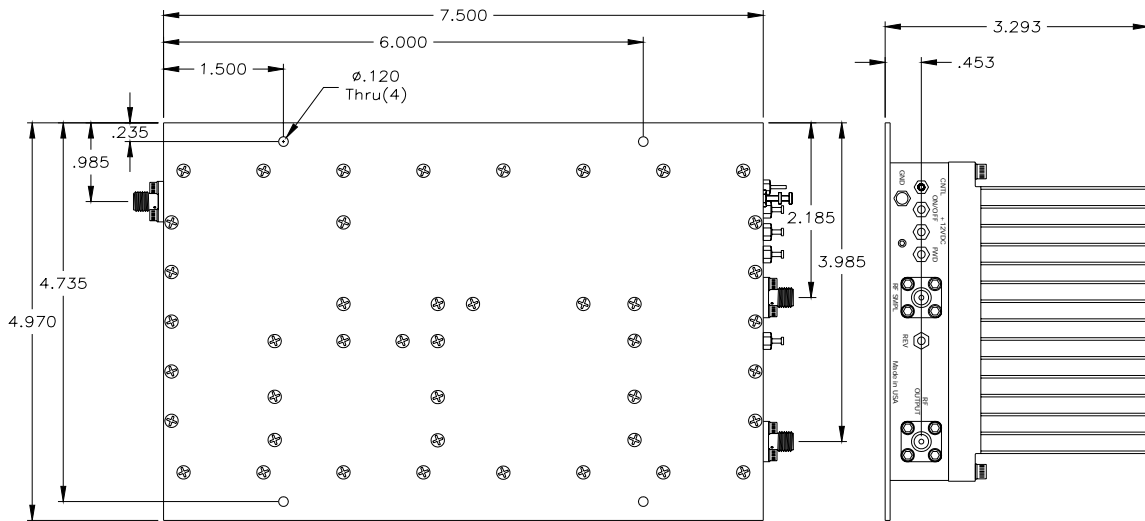


Parameter	Specification
Frequency Range	3.3 – 3.8 GHz
Pout (P1dB)	+43 dBm
Output Third Order Intercept Point (OIP3)	+54 dBm
Linear Gain	50 dB \pm 1 dB
Gain Flatness (over full band)	\pm .5 dB
Gain Change (over temperature)	\pm .5 dB
Input/Output Return Loss	-16 dB / -16 dB
DC Input Voltage	+12 Volts
DC Input Current	8.5 Amperes (operational)
Mechanical Dimensions	7.50 x 3.97 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

DIMENSIONS IN INCHES

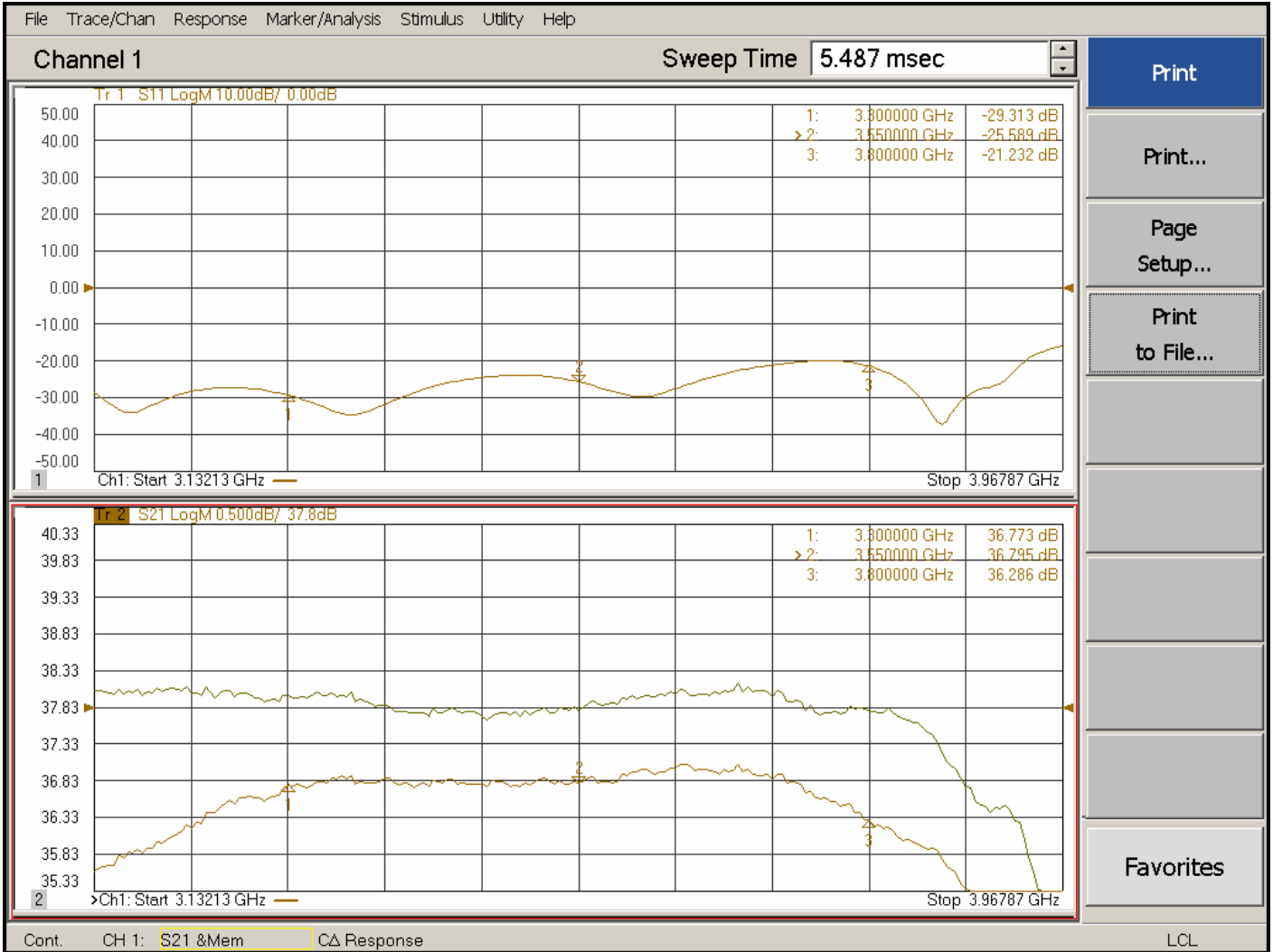


HEATSINK OPTION



S_{21} / S_{21} RESPONSE

(Module with 38dB gain shown, used to illustrate gain flatness which is identical @ 50 dB gain setting)



802.16 SPECTRAL MASK – 35dBm @ 3.3 GHz


Pin	Description	Values
RF INPUT	Input Connector (SMA Female)	- 6 dBm (max.)
RF OUTPUT	Output Connector (SMA Female)	+ 43 dBm @ P1dB
GND	Ground Turret	---
FWD	Forward Power Detector	+ 37 dBm Output Power \approx + 2.5 Volts
REV	Reverse Power Detector	∞ VSWR @ + 37 dBm \approx + 5.0 Volts
+12VDC	DC Input Voltage	+ 12 Volts @ 8.5 Amperes. (operational)
ON/OFF	TTL Logic On/Off	0 Volts = Off, + 5 Volts = On
CNTL	TTL Pulse Control	0 Volts = Off, + 5 Volts = On

Specifications subject to change without notice.