

Stealth Microwave's **SM5759-37HS** is an affordable solid state GaAs amplifier designed for products in the ISM band. The amplifier operates from 5.7 – 5.9 GHz, provides 39 dB of linear gain, has a P1dB of +37 dBm, and an OIP3 of +47 dBm. This high-linearity SSPA provides numerous standard features while maintaining a very small size.



Features

- Mis-Match Protected
- Single Power Supply
- Over Voltage Protection
- Thermal Protection with Auto Reset

Options

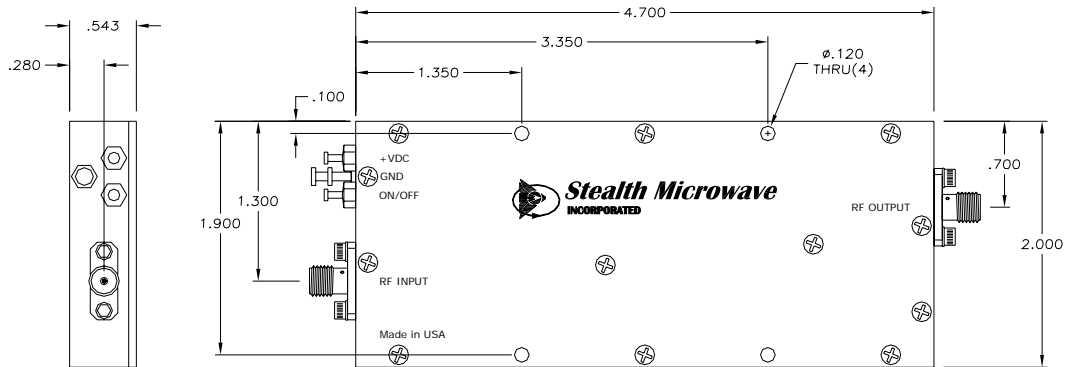
- TTL On/Off Control
- High Speed Switching for TDD with 1 μ s rise / fall time
- Heatsink
- +10V Operation

Configurations

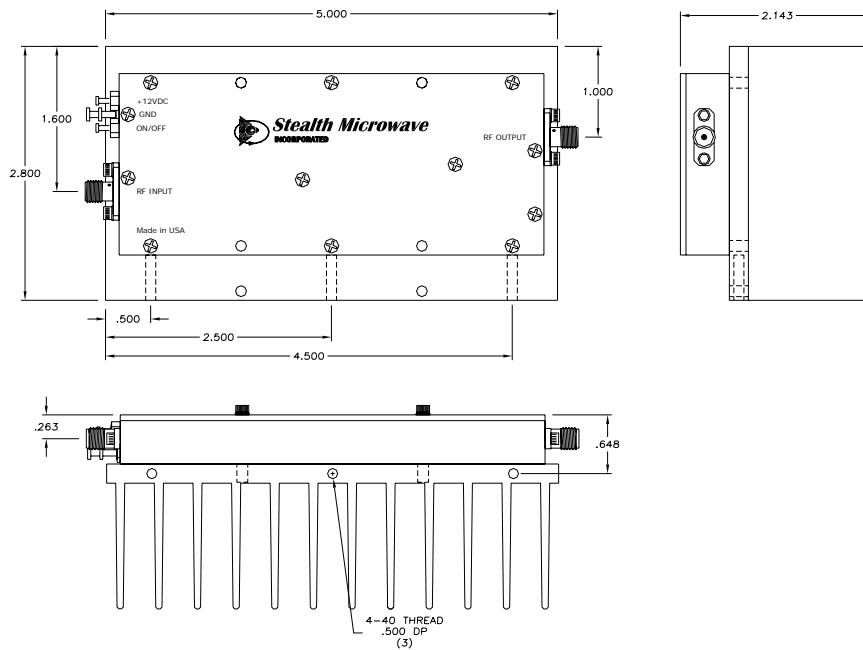
- Module
- Bench-Top Lab Unit
- 19" Rack

Parameter	Specification
Frequency Range	5.7 – 5.9 GHz
Pout (P1dB)	+ 37 dBm
Third Order Intercept Point	+ 47 dBm (typ.)
Linear Gain	39 dB \pm 1.0 dB
Gain Flatness over Full Band	\pm .5 dB
Input/Output Return Loss	-16 dB / -16 dB
DC Input Voltage	+12 Volts
DC Input Current (Operating)	2.3 Amperes
Mechanical Dimensions Without Heatsink	4.7 x 2.0 x .54 inches
RF Connectors	SMA Female
Operating Temperature (Baseplate)	-20°C to +85°C
Operating Humidity	95% Non-condensing
Operating Altitude	Up to 10,000 feet above Sea Level

DIMENSIONS IN INCHES



HEATSINK OPTION



Pin	Description	Values
RF IN	Input Connector (SMA Female)	+2 dBm max.
RF OUT	Output Connector (SMA Female)	+ 37 dBm @ P1dB
GND	Ground Turret	---
+12 VDC	DC Input Voltage	+ 12 Volts @ 2.3 Amperes
ON/OFF	TTL Logic On/Off (Or high speed switching if selected)	+5 Volts = On, 0 Volts = Off

Specifications subject to change without notice.

S₁₁ / S₂₁ RESPONSE

CH1 S11 LOG 10 dB/REF 0 dB 2:-21.238 dB 5 800.000 000 MHz

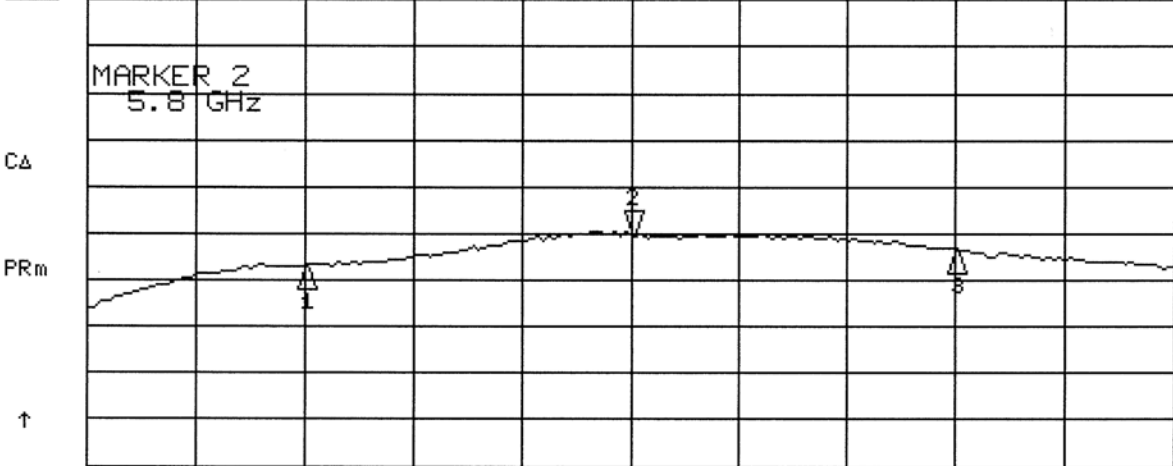


CH1 Markers

1:-19.516 dB
5.70000 GHz

3:-18.180 dB
5.90000 GHz

CH2 S21 LOG 1 dB/REF 39.86 dB 2: 39.821 dB 5 800.000 000 MHz



CH2 Markers

1: 39.161 dB
5.70000 GHz

3: 39.518 dB
5.90000 GHz

CENTER 5 800.000 000 MHz

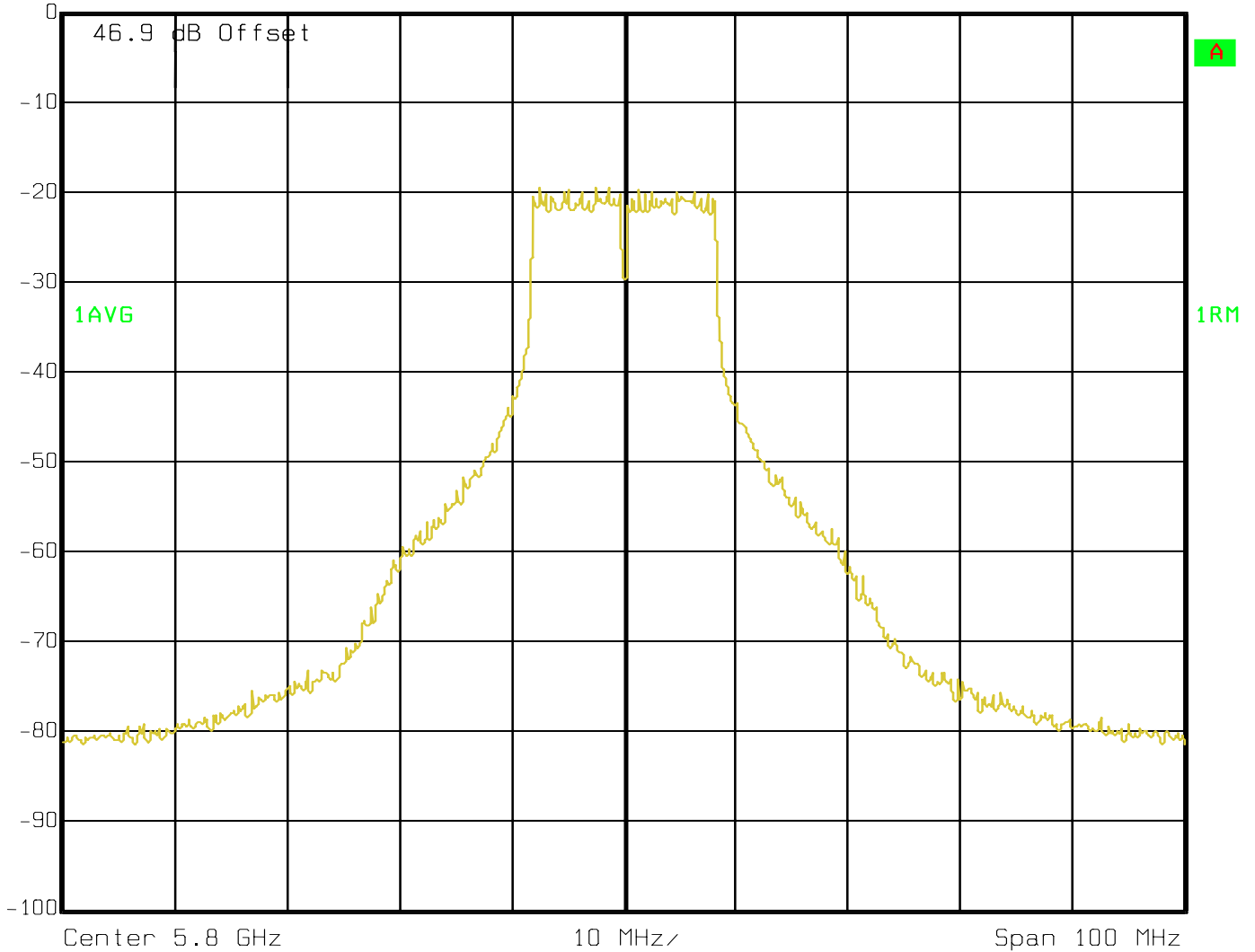
SPAN 333.000 000 MHz

802.11g 54Mbps – 32dBm @ 5.8 GHz



Ref Lvl
40.9 dBm

RBW	100 kHz	RF Att	10 dB
VBW	300 kHz		
SWT	25 ms	Unit	dB



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