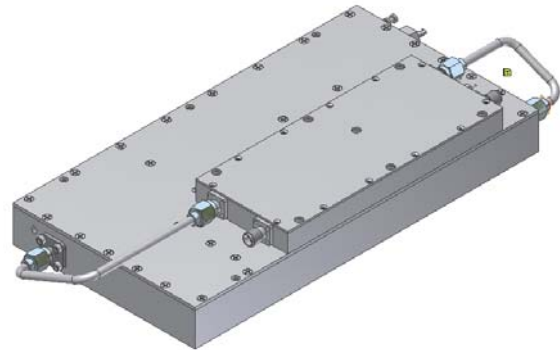


Stealth Microwave's **SMTR3338-43L** is a solid state bi-directional amplifier for use in 802.16e TDD products and systems. This compact, high linearity PA can easily be integrated into both BTS or CPE devices, and exhibits excellent uplink and downlink performance. Typical output power for 802.16e is 36-37 dBm meeting EVM and spectral mask requirements.



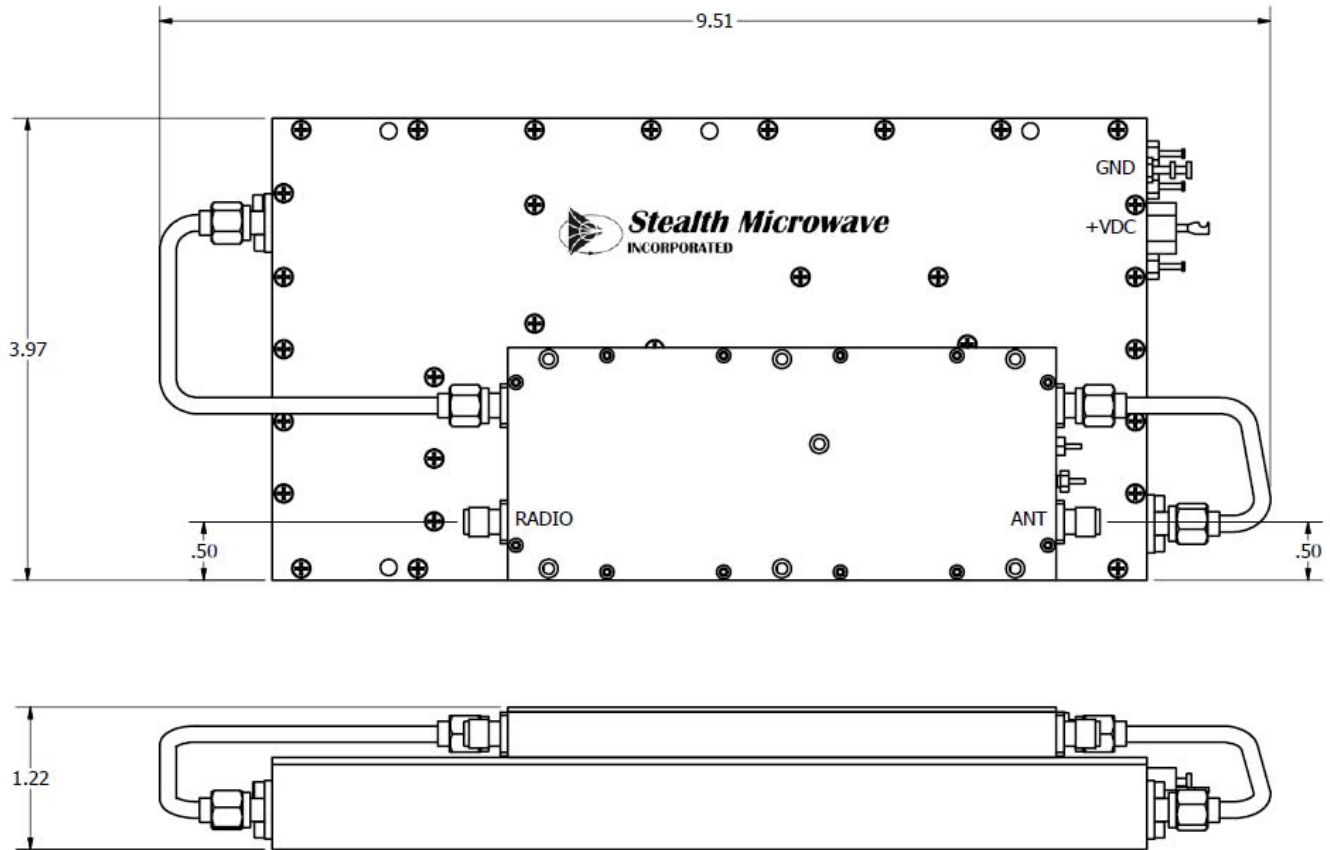
Features

- Auto Tx/Rx Switching
- Integral receive filter
- Various RF connector options available

Transmit Path				
Parameter	Specification			
	Min	Typ	Max	Unit
Frequency Range	3300	-	3800	MHz
802.16e Power Out	36			dBm
EVM at 37dBm		-33		dB
Gain		37 ± 1		dB
Gain Flatness		± 0.5		dB
Input Return Loss	-14	-18		dB
DC Input Voltage	10	12	13	V
Current Draw (RMS)		4.5		A
Receive Path				
Gain		20 ± 1		dB
P1dB	5			dBm
Noise Figure		3		dB
Input Return Loss		-14		dB
Current Draw		110		mA

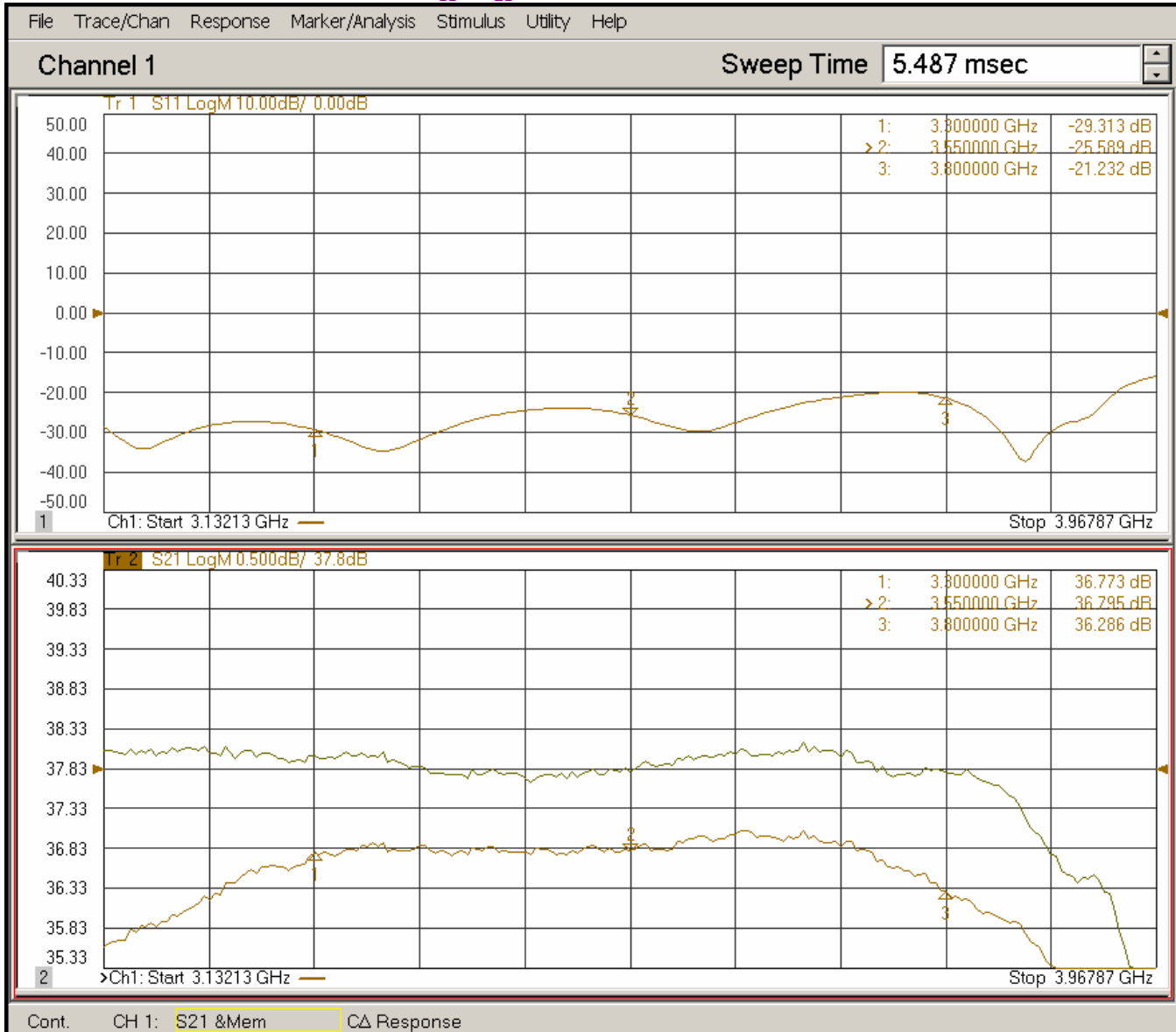
Mechanical Dimensions	9.5 x 4.0 x 1.22 inches
RF Connectors	SMA Female
Weight	1 lb. 4 oz.
Operating Temperature (Baseplate)	-10°C to +70°C

DIMENSIONS IN INCHES



Pin	Description	Values
RADIO	Input Connector (SMA-F)	+ 10 dBm (typical, adjustable per customer requirement)
ANT	Antenna Connector (SMA-F)	+36 dBm burst power (802.16e)
+VDC	Supply Voltage	+12V
GND	Ground	--

S_{11} / S_{21} MEASUREMENTS



EVM MEASUREMENT - 35 dBm 802.16 64QAM

IEEE 802.16 - 2004					
Frequency:	3.5 GHz	Signal Level Setting:	1.6 dBm	External Att:	34.9 dB
Sweep Mode:	Continuous	Trigger Mode:	Power	Trigger Offset:	-10 µs
Burst Type:	OFDM DL Burst	Modulation:	64QAM3/4	No Of Data Symbols:	1/2425

Result Summary						
No. of Bursts	6 *					
	Min	Mean	Limit	Max	Limit	Unit
EVM All Carriers	- 34.69	- 33.81	- 31.00	- 33.02	- 31.00	dB
EVM Data Carriers	- 34.76	- 33.82		- 33.00		dB
EVM Pilot Carriers	- 33.92	- 33.65		- 33.34		dB
IQ Offset	- 36.04	- 35.97	- 15.00	- 35.88	- 15.00	dB
Gain Imbalance	0.00	0.00		0.00		dB
Quadrature Error	0.000	0.000		0.000		°
Center Frequency Error	296.86	338.87	± 28000	377.29	± 28000	Hz
Clock Error	0.00	0.00	± 8	0.00	± 8	ppm
Burst Power	37.67	37.68		37.69		dBm
Crest Factor	7.06	7.07		7.09		dB
RSSI	5.56	5.70		5.71		dBm
RSSI Standard Deviation		- 0.65				dB
CINR	31.20	31.70		33.05		dB
CINR Standard Deviation		19.49				dB

SPECTRAL MASK – 35 dBm 802.16 64QAM

