

Stealth Microwave's **SMTR2425-11G30** is a solid state amplifier designed for use in 802.11g / 802.16e WLAN systems. This SSPA is primarily used in military applications.

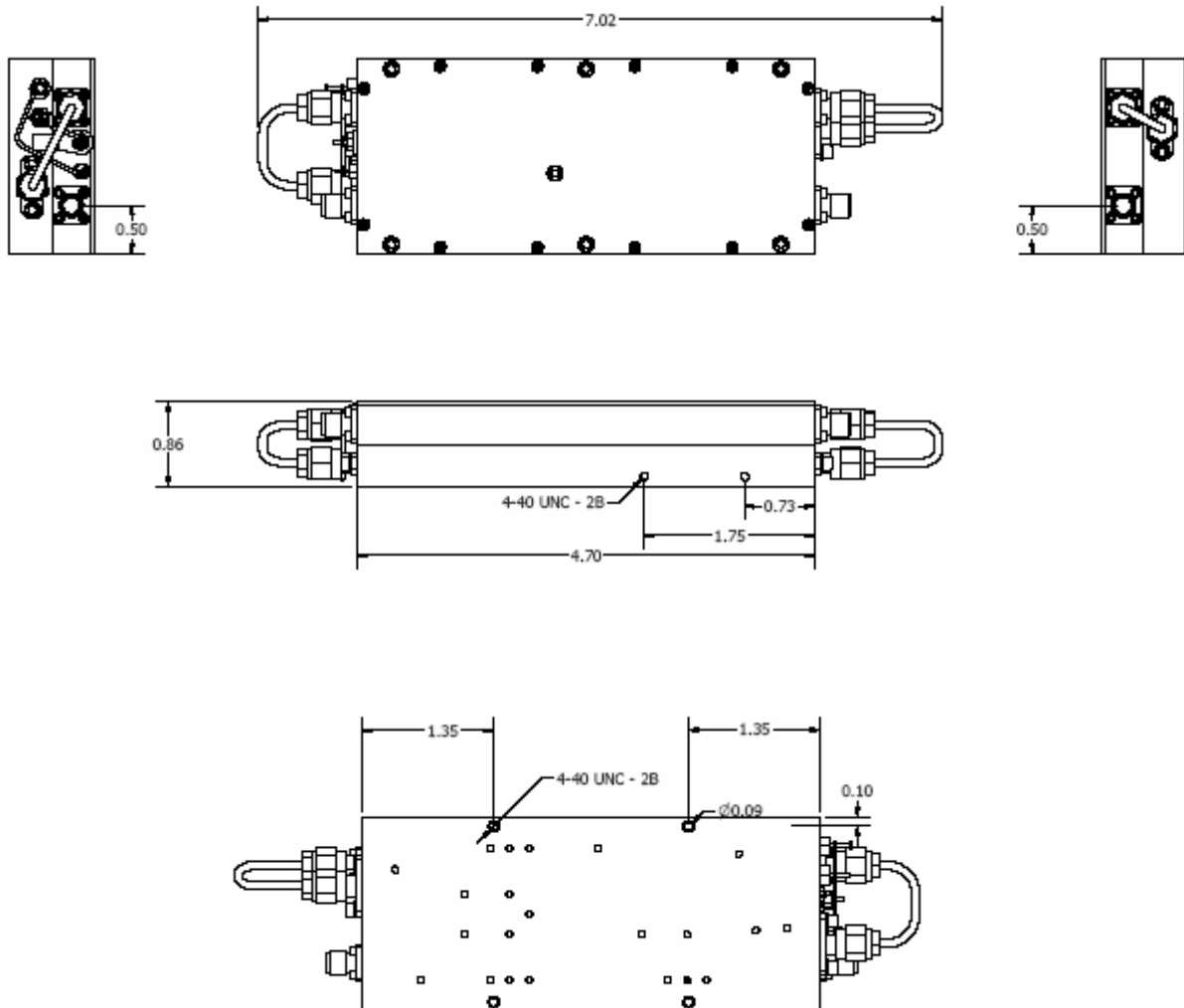
Features

- Automatic Tx/Rx Switching
- Compatible with most military WLAN equipment
- Integrated Receive filter

Transmit Path	
Parameter	Specification
Frequency Range	2.400-2.500 GHz
Return Loss (Tx Input)	-14dB min
802.11g Compliant Power Out (52Mbps)	+30dBm Avg. @ -30dB EVM
Gain	16 +/- 1 dB +/- .5 dB Flatness
Noise Figure	3dB Typ. 4 dB Max.
DC Input Voltage	+ 12 Volts
DC Input Current (On Transmit)	1.8 A Typ. 2.0 A Max
Receive Path	
Receive Gain	20 +/- 1 dB +/- .5 dB Flatness
Rx Filtering @ Freq < 2200 MHz and > 2650 MHz	30dB min (see plot for details)
DC Input Current (On Recieve)	< 180 mA
Temp Range	-20 to +85 degC
Weight	10 oz

Specifications subject to change without notice.

DIMENSIONS IN INCHES



Pin	Description	Values
RF INPUT	Input Connector (SMA Female)	+14 dBm nominal / +23dBm max
RF OUTPUT	Output Connector (SMA Female)	+30 dBm
GND	Ground Turret	---
+12VDC	DC Input Voltage	+ 12 Volts @ 2.0 Amperes (Max.)

TYPICAL EVM PERFORMANCE @ 31dBm 802.11g 54Mbps

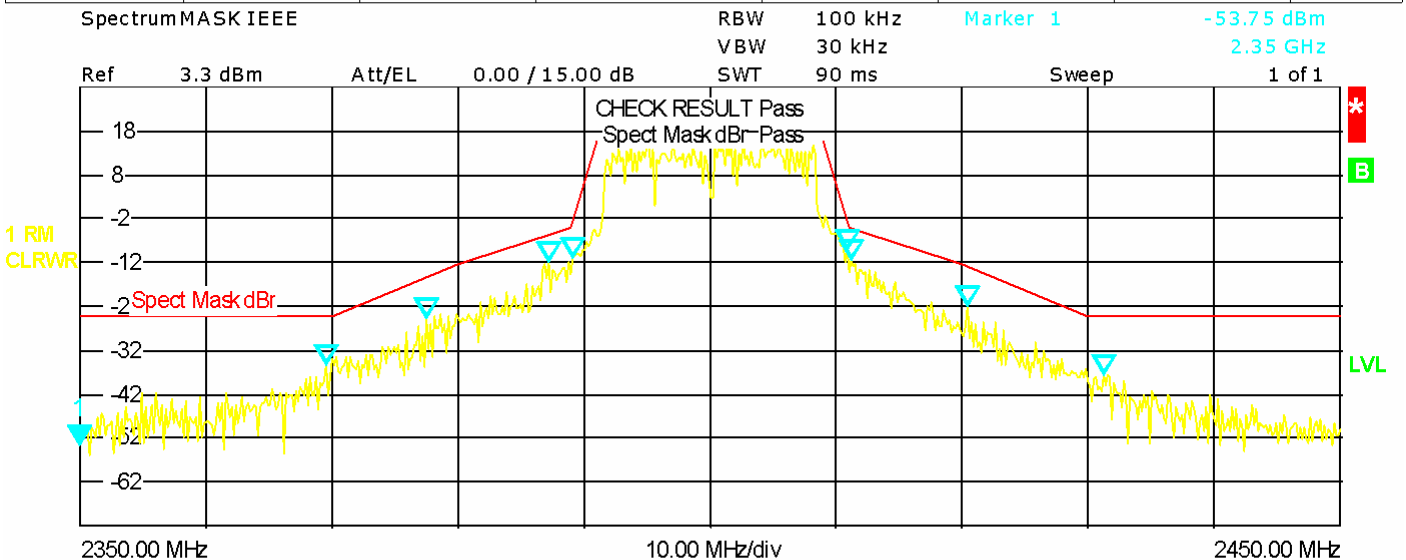
IEEE 802.11g					
Frequency:	2.4 GHz	Ref Level:	18.1 dBm	External Att:	24.7 dB
Sweep Mode:	Continuous	Trigger Mode:	Free Run	Trigger Offset:	-10 μ s
Preamble Type:	OFDM	Modulation:	54 Mbps 64 QAM	PSDU Data Length:	1/0

Result Summary						
No. of Bursts	3					
	Min	Mean	Limit	Max	Limit	Unit
EVM All Carriers	1.82	1.82	5.62	1.82	5.62	%
	- 34.81	- 34.81	- 25.00	- 34.79	- 25.00	dB
EVM Data Carriers	1.81	1.82	5.62	1.83	5.62	%
	- 34.83	- 34.80	- 25.00	- 34.77	- 25.00	dB
EVM Pilot Carriers	1.76	1.82	39.81	1.87	39.81	%
	- 35.11	- 34.82	- 8.00	- 34.56	- 8.00	dB
IQ Offset	- 36.80	- 36.79	- 15.00	- 36.78	- 15.00	dB
Gain Imbalance	- 0.14	- 0.14		- 0.12		%
	- 0.01	- 0.01		- 0.01		dB
Quadrature Error	- 0.10	- 0.09		- 0.08		°
Center Frequency Error	179.67	181.39	\pm 60000	183.57	\pm 60000	Hz
Symbol Clock Error	0.17	0.62	\pm 25	1.15	\pm 25	ppm
Burst Power	31.31	31.31		31.31		dBm
Crest Factor	8.60	8.61		8.62		dB

Running ...

TYPICAL ACP PERFORMANCE @ 30dBm 802.11g 54Mbps

IEEE 802.11g							
Frequency:	2.4 GHz	Ref Level:	3.3 dBm	External Att:	24.7 dB		
Sweep Mode:	Continuous	Trigger Mode:	Free Run	Trigger Offset:	-10 μ s		
Preamble Type:	OFDM	Modulation:	54 Mbps 64 QAM	PSDU Data Length:	1/0		
Spectrum Emission Mask							
Tx Channel:	Bandwidth	18 MHz	Power	16.69 dBm			
Start Freq. rel.	Stop Freq. rel.	RBW	Freq. at Delta to Limit	Pwr Abs.	Pwr Rel.	Delta to Limit	
-50.000 MHz	-30.000 MHz	100 kHz	2.369551282 GHz	-35.45 dBm	-51.26 dB	-11.26 dB	
-30.000 MHz	-20.000 MHz	100 kHz	2.377564102 GHz	-24.90 dBm	-40.72 dB	-9.80 dB	
-20.000 MHz	-11.000 MHz	100 kHz	2.387179487 GHz	-11.93 dBm	-27.74 dB	-6.13 dB	
-11.000 MHz	-9.000 MHz	100 kHz	2.389102564 GHz	-11.20 dBm	-27.02 dB	-8.04 dB	
9.000 MHz	11.000 MHz	100 kHz	2.410897436 GHz	-9.17 dBm	-24.99 dB	-6.02 dB	
11.000 MHz	20.000 MHz	100 kHz	2.411217949 GHz	-11.56 dBm	-27.38 dB	-7.18 dB	
20.000 MHz	30.000 MHz	100 kHz	2.420352564 GHz	-22.01 dBm	-37.83 dB	-9.40 dB	
30.000 MHz	50.000 MHz	100 kHz	2.431250000 GHz	-37.97 dBm	-54.66 dB	-13.26 dB	



Running ...

TYPICAL Rx FILTER PERFORMANCE

