Model SMTR2425-11B40

2.4-2.5 GHz
10W Bi-Directional Power Amplifier

Stealth Microwave's **SMTR2425-11B40** is a solid state amplifier for use in 802.11b WLAN systems. This SSPA utilizes state of the art LDMOS FET transistors which allow for more efficient operation while still meeting EVM limits. Designed primarily for military use, the design can be applied for various ISM band applications as well.

Features

- Automatic Gain Control circuitry provides consistent 10W output over a wide input range
- LED Tx/Rx mode status indicator
- +12V Power Supply (+28V version available)
- Rugged Weatherproof Housing
- Various DC/RF connector options available

Transmit Path	
Parameter	**Specification**
Frequency Range	2400-2500 MHz
802.11b Compliant Power Out	+ 40 dBm / 10W (min) Output power can be raised/lowered based on requirements
Gain	Variable via AGC, can be fixed if required.
DC Input Voltage	+12 or + 28 Volts
DC Input Current (On Transmit)	2.5 – 3.0 A (10W output)
Receive Path	
Receive Gain	23 dB (can be adjusted based on requirements)
Receive Noise Figure	3 dB typical, 4 dB max.*
DC Input Current (On Recieve)	Approx 150 mA

Mechanical Dimensions	6 x 5 x .8 inches
RF Connectors	SMA Female
Operating Temperature	0ºC to +65ºC

** Contact sales if lower NF required*

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

EVM Performance – 10W Average Power for 802.11b @11Mbps

IEEE 802.11b

Frequency:	2.45 GHz	Ref Level:	18.6 dBm	External Att:	27.4 dB
Sweep Mode:	Continuous	Trigger Mode:	Power	Trigger Offset:	-10 µs
Preamble Type:	Long PLCP	Modulation:	11 Mbps CCK	PSDU Data Length:	1/0 Bytes

GENERAL SETTINGS | DEMOD SETTINGS | DISPLAY LIST GRAPH | SPECTRUM MASK | SPECTRUM FFT | SPECTRUM ACPR

Result Summary

	Min	Mean	Limit	Max	Limit	Unit
No. of Bursts	2					*
Peak Vector Err (IEEE)	15.61	15.66	35.00	15.71	35.00	%
Burst EVM	5.89	5.89		5.89		%
	-24.60	-24.60		-24.59		dB
IQ Offset	-48.09	-48.08		-48.08		dB
Gain Imbalance	0.75	0.76		0.76		%
	-0.07	-0.07		-0.07		dB
Quadrature Error	0.35	0.36		0.36		°
Center Frequency Error	213.46	214.01	± 61250	214.57	± 61250	Hz
Chip Clock Error	0.08	0.09	± 25.00	0.10	± 25.00	ppm
Rise Time	0.34	0.34	2.00	0.34	2.00	µs
Fall Time	0.25	0.25	2.00	0.25	2.00	µs
Mean Power	40.87	40.87		40.87		dBm
Peak Power	42.33	42.34		42.35		dBm
Crest Factor	1.47	1.47		1.48		dB

Running ...

SPECTRUM | WLAN | AUTO LVL | RUN SGL | RUN CONT | REFRESH | SCREEN A

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Rise/Fall Time Measurements

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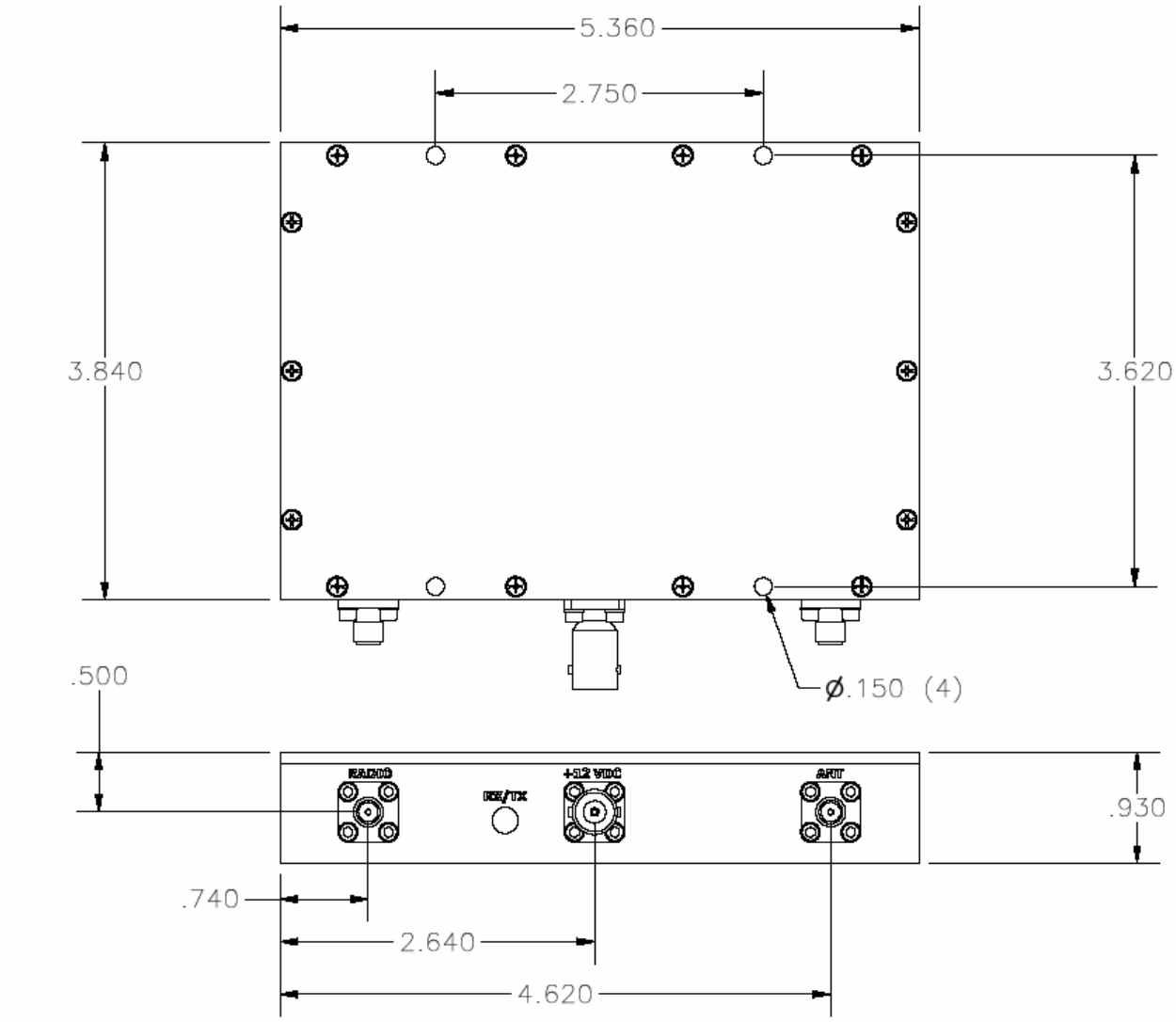
DIMENSIONS IN INCHES



Pin	Description	Values
RF INPUT	Input Connector (SMA Female)	Input range set per customer requirements – Typically +5 to +20dBm input
RF OUTPUT	Output Connector (SMA Female)	+40dBm
GND	Ground Turret	---
+12VDC	DC Input Voltage	+ 12 Volts @ 2.5 Amperes (typ.)

Specifications subject to change without notice.

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