



TRI-MAG, Inc.
 ® your POWER Specialists

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HIGH DENSITY THW(2:1) SERIES DC-DC CONVERTER 2:1 & 4:1 Wide Range Input

FEATURES

- Remote Sense
- Current Limit
- Over voltage Protection
- Thermal Shutdown
- Inhibit and load share (option)
- 20 to 70V wide input Voltage Range DC/DC Converter (THX series)
- PC Mountable
- High Stable Regulated Output
- Thermally Conductive Encapsulant
- 100% Burn-in And Triple Tested
- MTBF > 280,000 Minimum

APPLICATIONS

- Computer & Local Area Network
- N + 1 Redundant Systems
- Telecommunications
- Industrial And Testing Equipment
- Battery-Powered Equipment
- Medical Equipment
- Distributed Power Systems



ELECTRICAL SPECIFICATIONS

Input Voltage Range	THW Series (2:1), THX Series (4:1)
Output voltage Accuracy	±2%
Load Regulation	±0.5%
Line Regulation	±0.5%
Ripple & Noise (Pk-Pk, DC - 20MHz)	3% of nominal output voltage
Short Circuit Protection	Continuous < or = 25% of full load
OverVoltage Protection	115% to 140% of nominal output voltage
Transient Response	500µs (micro second)
Thermal Shutdown	90°C and 105°C on base plate

GENERAL SPECIFICATIONS

Optional Inhibit (On/Off)	2mA sink & saturation voltage < 0.75V (Device)
Sharing in Parallel	Up to 4 module (within 1% output voltage accuracy)
Efficiency (at full load)	70% to 90%
Isolation Voltage	3750 VAC
Operating Frequency	200KHz Typical
Base Plate Operating Temperature	-25°C to +100°C
Storage Temperature	-40°C to +100°C
Isolation Resistance	10 ⁹ Ohms, min.
Reflected Ripple Current	20mA, typical
Weight	12.7 Oz. (358grams)
Case Material	Non-conductive plastic with metal base



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50-240 WATT: 2:1 WIDE RANGE INPUT, SINGLE OUTPUT

Watts	Model Type	Input Voltage (VDC)	Input Current A (typ)	Output Voltage (VDC)	Output Current A (max)
100-150	THW2403S	20-36 (24)	5	3.3	25
	THW2405S	20-36 (24)	7.7	5	25
	THW2406S	20-36 (24)	7.4	6	20
	THW2412S	20-36 (24)	8.1	12	11
	THW2415S	20-36 (24)	8.3	15	9
	THW2424S	20-36 (24)	8.1	24	5.5
	THW2448S	20-36 (24)	8.8	48	3
150	THW4803S	40-65 (48)	3	3.3	30
	THW4805S	40-65 (48)	4.5	5	30
	THW4806S	40-65 (48)	4.5	6	25
	THW4812S	40-65 (48)	5	12	14
	THW4815S	40-65 (48)	4.9	15	11
	THW4824S	40-65 (48)	5	24	7
	THW4848S	40-65 (48)	5	48	3.5
110-200	THW2C03S	110-185 (155)	1.1	3.3	35
	THW2C05S	110-185 (155)	1.6	5	35
	THW2C06S	110-185 (155)	1.6	6	30
	THW2C12S	110-185 (155)	2	12	18
	THW2C15S	110-185 (155)	2	15	15
	THW2C24S	110-185 (155)	2	24	9
	THW2C48S	110-185 (155)	2	48	4.5
130-240	THW3C03S	220-380 (300)	0.6	3.3	40
	THW3C05S	220-380 (300)	0.9	5	40
	THW3C06S	220-380 (300)	1.0	6	35
	THW3C12S	220-380 (300)	1.1	12	20
	THW3C15S	220-380 (300)	1.1	15	16
	THW3C24S	220-380 (300)	1.1	24	10
	THW3C48S	220-380 (300)	1.1	48	5

Specifications subject to change without notice.

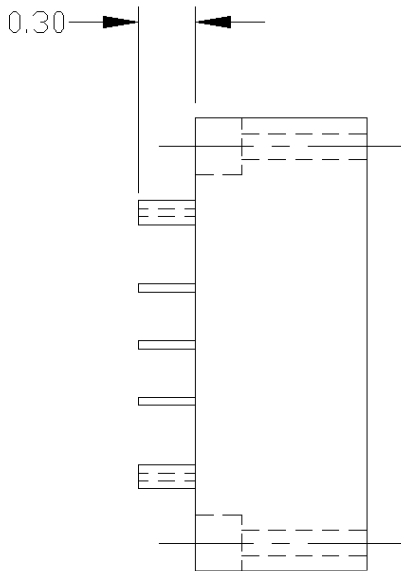
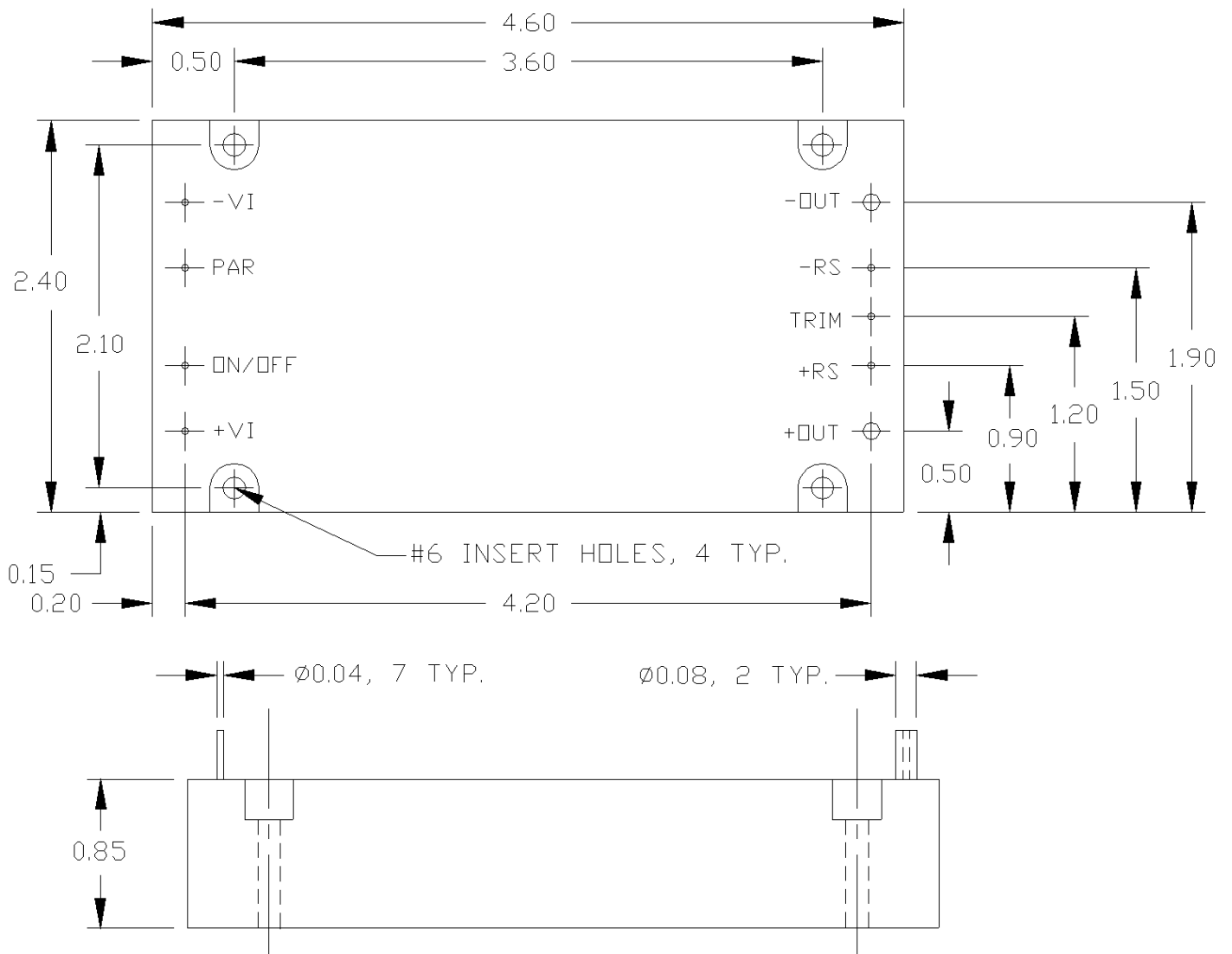
NOTE:

- A. FOR OUTPUT CONFIGURATION OTHER THEN SHOWN ABOVE, PLEASE CONSULT THE MANUFACTURE.
- B. PROPER HEAT SINK IS REQUIRED FOR ALL MODELS.
- C. SCREW TERMINAL TYPE IS ALSO AVAILABLE.
- D. FOR FRONT-END RECTIFIER AND POWER FACTOR CORRECTION PLEASE REFER TO SWITCHING POWER SUPPLIE CATALOG TFE600 SERIES.
- E. THE MAXIMUM CURRENT RATINGS ARE VAILD ONLY IF THE BASE-PLATE TEMPERATURE IS HELD BELOW 85°C OR 100°C.
- F. APPLICATION NOTES AVAILABLE.

THW SERIES MAXIMUM OUTPUT CURRENT RATING

Voltage (Volt)		SINGLE OUTPUT						
IN	OUT	3.3	5	6	12	15	24	48
24/28	25A	25A	20A	11A	9A	5.5A	3A	
48	30A	30A	25A	14A	11A	7A	3.5A	
155	35A	35A	30A	15A	15A	9A	4.5A	
300	40A	40A	35A	20A	16A	10A	5A	

1. SINGLE OUTPUT PACKAGE



NOTES:

1. ALL DIMENSIONS IN INCHES
2. TOLERANCE: .XX=±0.010
.XXX=±0.005
3. SIZE: 4.6"L x 2.4"W x 0.8"H
4. MTG HOLE: 3.6" x 2.1" (#6 CL.)