



Thunder Series – High Voltage DC/DC Converter

Features

- Outputs from ± 500 to ± 5000 VDC
- Miniature Size – Low Profile
- High Efficiency
- High Reliability/Long life
- Short Circuit/Over Current Protection
- Low output ripple
- Regulated - No minimum load Required
- Wide environmental range
- Custom Designs Available – *consult with factory*

AMI's Thunder broad line of miniature, high voltage dc-dc converters offer regulated high voltage output directly proportional to the input voltage. The Thunder series is encapsulated in high thermal conductivity epoxy resin for use in harsh environmental environments. These single output devices are available in a variety of input and output voltages.

Electrical Specifications

- Output Regulation.....Proportional
- Short Circuit Protection.....Yes
- Output Voltage Tolerance.....5%
- Output Power1W to 2W

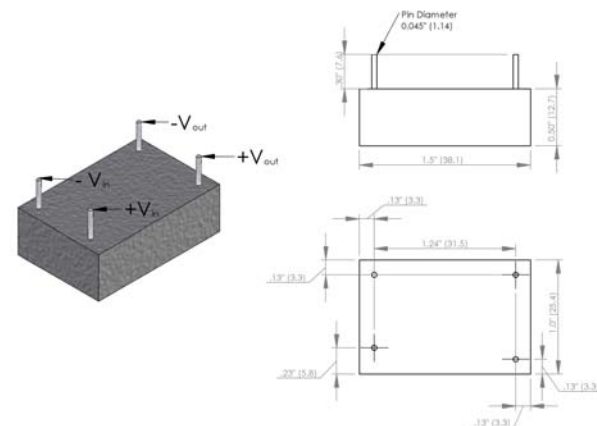
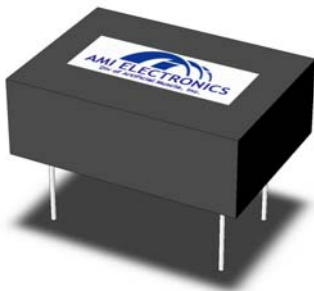
General Specifications

- Dimensions (typ)...27 x 40 x 15mm
 - Weight.....29g
 - Environmental*.....-10° to +60°C
- * *Expanded Op Temps available*

Typical Applications

- Electroactive Polymers
- Piezo Devices
- Atomic Force Microscopes
- Medical Imaging & Electronics
- Electrophoresis
- Chromatography Optics
- Avalanche Photodiodes
- Sustaining Ion Pumps
- PMT Mass Spectrometry
- Ordnance Triggers
- Electrostatic Chucks

Case Size 'A' Shown



Preliminary – Information Subject to Change

● AMI Electronics – Div. of Artificial Muscle, Inc. ● 925 Hamilton Ave Menlo Park CA 94025 USA ●

● Tel: 888-331-2643 ● Fax 650-331-2877 ● www.amielectronics.com ● Rev G/6/06

Thunder Series – High Voltage DC/DC Converter

| Model Number | Input Specifications | | | Output Specifications | | |
|--------------|----------------------|-----------------|-------------------|-----------------------|-----------------|-------------------|
| | Voltage | No Load Current | Full Load Current | Voltage | Maximum Current | Ripple* (typical) |
| T-0505 | 0-5 VDC | 50 mA | 400mA | 500 VDC | 2 mA | ±2% |
| T-1005 | 0-5 VDC | 50 mA | 400mA | 1000 VDC | 1.0 mA | ±2% |
| T-1505 | 0-5 VDC | 50 mA | 400mA | 1500 VDC | 670 µA | ±2% |
| T-2005 | 0-5 VDC | 50 mA | 400mA | 2000 VDC | 500 µA | ±2% |
| T-2505 | 0-5 VDC | 50 mA | 400mA | 2500 VDC | 400 µA | ±2% |
| T-3005 | 0-5 VDC | 50 mA | 400mA | 3000 VDC | 333 µA | ±2% |
| T-3505 | 0-5 VDC | 50 mA | 400mA | 3500 VDC | 286 µA | ±2% |
| T-4005 | 0-5 VDC | 50 mA | 400mA | 4000 VDC | 250 µA | ±2% |
| T-4505 | 0-5 VDC | 50 mA | 400mA | 4500 VDC | 222 µA | ±2% |
| T-5005 | 0-5 VDC | 50 mA | 400mA | 5000 VDC | 200 µA | ±2% |
| T-0512 | 0-12 VDC | 25 mA | 280 mA | 500 VDC | 4 mA | ±2% |
| T-1012 | 0-12 VDC | 25 mA | 280 mA | 1000 VDC | 2 mA | ±2% |
| T-1512 | 0-12 VDC | 25 mA | 280 mA | 1500 VDC | 1.3 mA | ±2% |
| T-2012 | 0-12 VDC | 25 mA | 280 mA | 2000 VDC | 1.0 mA | ±2% |
| T-2512 | 0-12 VDC | 25 mA | 280 mA | 2500 VDC | 800 µA | ±2% |
| T-3012 | 0-12 VDC | 25 mA | 280 mA | 3000 VDC | 667 µA | ±2% |
| T-3512 | 0-12 VDC | 25 mA | 280 mA | 3500 VDC | 570 µA | ±2% |
| T-4012 | 0-12 VDC | 25 mA | 280 mA | 4000 VDC | 500 µA | ±2% |
| T-4512 | 0-12 VDC | 25 mA | 280 mA | 4500 VDC | 444 µA | ±2% |
| T-5012 | 0-12 VDC | 25 mA | 280 mA | 5000 VDC | 400 µA | ±2% |
| T-0524 | 0-24 VDC | 15 mA | 139 mA | 500 VDC | 4 mA | ±2% |
| T-1024 | 0-24 VDC | 15 mA | 139 mA | 1000 VDC | 2 mA | ±2% |
| T-1524 | 0-24 VDC | 15 mA | 139 mA | 1500 VDC | 1.3 mA | ±2% |
| T-2024 | 0-24 VDC | 15 mA | 139 mA | 2000 VDC | 1.0 mA | ±2% |
| T-2524 | 0-24 VDC | 15 mA | 139 mA | 2500 VDC | 800 µA | ±2% |
| T-3024 | 0-24 VDC | 15 mA | 139 mA | 3000 VDC | 667 µA | ±2% |
| T-3524 | 0-24 VDC | 15 mA | 139 mA | 3500 VDC | 570 µA | ±2% |
| T-4024 | 0-24 VDC | 15 mA | 139 mA | 4000 VDC | 500 µA | ±2% |
| T-4524 | 0-24 VDC | 15 mA | 139 mA | 4500 VDC | 444 µA | ±2% |
| T-5024 | 0-24 VDC | 15 mA | 139 mA | 5000 VDC | 400 µA | ±2% |

* Note: If required, ripple can be reduced even further with external capacitor

Custom Designs available for quantity purchase – Contact Factory

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