



AM Power Systems

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Thunder Series – High Voltage DC/DC Converter

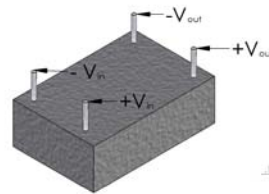
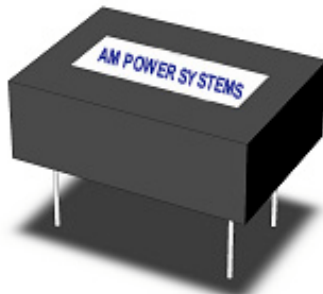
Features

- Unipolar outputs from 500 to 5000VDC either Pos or Neg Polarity
- 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*)

AM Power Systems' 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



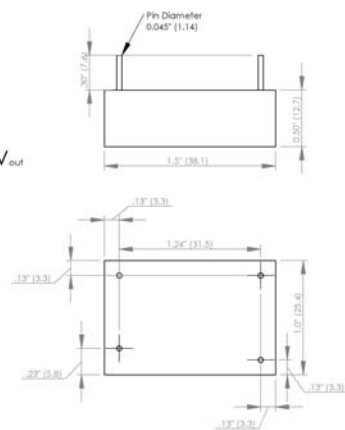
General Specifications

- 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
- Ordonance Triggers
- Electrostatic Chucks

Case Size 'A' Shown



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)
AM-0505N & P	0-5 VDC	50 mA	400mA	500 VDC	2 mA	±2%
AM-1005	0-5 VDC	50 mA	400mA	1000 VDC	1.0 mA	±2%
AM-1505	0-5 VDC	50 mA	400mA	1500 VDC	670 µA	±2%
AM-2003P	0-3 VDC	50 mA	400mA	2000 VDC	500 µA	±2%
AM-2003N	0-3 VDC	50 mA	400mA	2500 VDC	400 µA	±2%
AM-2005	0-5 VDC	50 mA	400mA	2000 VDC	500 µA	±2%
AM-2505	0-5 VDC	50 mA	400mA	2500 VDC	400 µA	±2%
AM-3005	0-5 VDC	50 mA	400mA	3000 VDC	333 µA	±2%
AM-3505	0-5 VDC	50 mA	400mA	3500 VDC	286 µA	±2%
AM-4005	0-5 VDC	50 mA	400mA	4000 VDC	250 µA	±2%
AM-4505	0-5 VDC	50 mA	400mA	4500 VDC	222 µA	±2%
AM-5005	0-5 VDC	50 mA	400mA	5000 VDC	200 µA	±2%
AM-0512	0-12 VDC	25 mA	280 mA	500 VDC	4 mA	±2%
AM-1012	0-12 VDC	25 mA	280 mA	1000 VDC	2 mA	±2%
AM-1512	0-12 VDC	25 mA	280 mA	1500 VDC	1.3 mA	±2%
AM-2012	0-12 VDC	25 mA	280 mA	2000 VDC	1.0 mA	±2%
AM-2512	0-12 VDC	25 mA	280 mA	2500 VDC	800 µA	±2%
AM-3012	0-12 VDC	25 mA	280 mA	3000 VDC	667 µA	±2%
AM-3512	0-12 VDC	25 mA	280 mA	3500 VDC	570 µA	±2%
AM-4012	0-12 VDC	25 mA	280 mA	4000 VDC	500 µA	±2%
AM-4512	0-12 VDC	25 mA	280 mA	4500 VDC	444 µA	±2%
AM-5012	0-12 VDC	25 mA	280 mA	5000 VDC	400 µA	±2%
AM-0524	0-24 VDC	15 mA	139 mA	500 VDC	4 mA	±2%
AM-1024	0-24 VDC	15 mA	139 mA	1000 VDC	2 mA	±2%
AM-1524	0-24 VDC	15 mA	139 mA	1500 VDC	1.3 mA	±2%
AM-2024	0-24 VDC	15 mA	139 mA	2000 VDC	1.0 mA	±2%
AM-2524	0-24 VDC	15 mA	139 mA	2500 VDC	800 µA	±2%
AM-3024	0-24 VDC	15 mA	139 mA	3000 VDC	667 µA	±2%
AM-3524	0-24 VDC	15 mA	139 mA	3500 VDC	570 µA	±2%
AM-4024	0-24 VDC	15 mA	139 mA	4000 VDC	500 µA	±2%
AM-4524	0-24 VDC	15 mA	139 mA	4500 VDC	444 µA	±2%
AM-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

Preliminary – Information Subject to Change