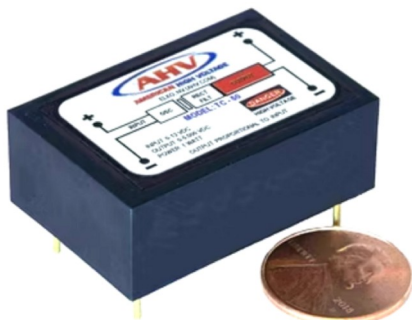




AMERICAN HIGH VOLTAGE

CTC Series Micro-Sized

**HIGH VOLTAGE
POWER SUPPLY**



CTC Series – 1Watt Center tapped

- Output proportional to Input
- Floating output
- 100V to 5kV Output Voltages Available
- Provides both + and - outputs

The CTC Series is a broad line of micro-sized, high reliability DC to DC converters supplying up to +/- 3,000v in only 0.563 cubic inches. These tiny converters are ideal for applications requiring both a positive and negative output voltage from the same unit. The output is directly proportional to the input voltage and is linear from 0.7V input to 12VDC. Ripple is kept low by using a sinewave resonant oscillator. Their power output is limited to 1 Watt at full output voltage. All CTC modules are reverse polarity and short circuit protected.

TYPICAL APPLICATIONS

General Lab Use
Electrostatics
Bias Voltage
Op-Amp Supply
Ultrasonics

SPECIFICATIONS

Input Voltage:

5 VDC Input (dash 5Vin Models)
12 VDC Input Standard
24 VDC Input (dash 24Vin Models)
48 VDC Input (dash 48Vin Models)

Output Voltage:

From +/-100VDC to +/- 3,000VDC
See "model selection table"

Output Polarity:

Output is floating from input

Output Current:

depends upon Vout
See "model selection table"
Power is limited to 1 Watt

SPECIFICATIONS Continued

Voltage Regulation

10% NL – FL (typical) Resistive load

Ripple:

1% maximum at full load each side

Temperature Coefficient:

100 ppm/ °C

Stability:

< 0.1% drift / hour after warm-up to operating temperature

Operating Temperature:

-55 °C to +100 °C case temperature

Humidity:

10% to 90% RH non-condensing

Input Terminals:

Gold pins (0.04 inch diameter x 0.25 inch length)

Output Terminals:

Gold Pins (0.04 inch diameter x 0.25 inch length)

Input Current:

No Load: 30 mA
Full Load: 125 mA

Power Efficiency:

70% typical

Encapsulation:

Epoxy potting

Short Circuit Ability:

Fold-back circuitry

Switching Frequency:

Typical 30kHz

HIGH VOLTAGE
for the
WORLD

Corporate Office:
2002 Idaho Street
Elko, Nevada 89801
(775) 777-3631

www.ahv.com
American High Voltage is an
ISO 9001 company

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SPECIFICATIONS Continued

Cooling:

Convection: 1W full load = 10 ° C case temperature rise

Dimensions:

1.5 L x 1.0 W x 0.50 H (38.1mm x 25.4mm x 12.7mm)

Volume = 0.75 inch³ (12.3 cm³)

Weight:

2.0 oz (55 grams)

Encapsulation:

Epoxy potting

Finish:

Smooth Diallyl-Phthalate Thermoset Case

Terminations:

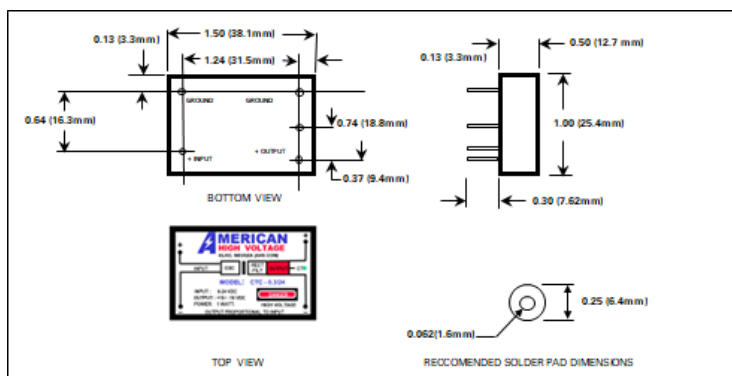
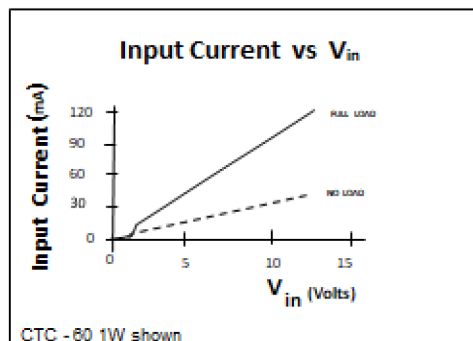
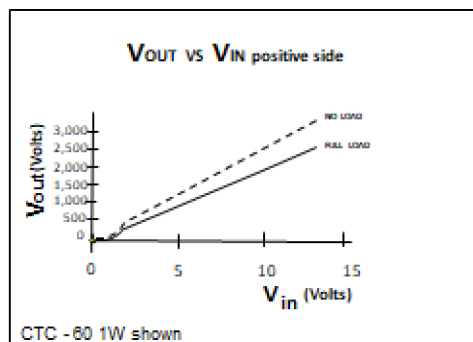
Electro-Gold Plated Brass pins (4)

MODEL SELECTION TABLE

Model	Voltage	Power Available
CTC-1	+/- 50v	1w
CTC-2	+/- 100v	1w
CTC-3	+/- 150v	1w
CTC-5	+/- 250v	1w
CTC-8	+/- 400v	1w
CTC-10	+/- 500v	1w
CTC-15	+/- 750v	1w
CTC-20	+/- 1,000v	1w
CTC-30	+/- 1,500v	1w
CTC-40	+/- 2,000v	1w
CTC-50	+/- 2,500v	1w
CTC-60	+/- 3,000v	1w

The above products are available in:
5V, 12V (standard), 24v , or 48v input

PERFORMANCE CHARTS



Ordering Information:

CTC – XX / ZVin

XX = Output voltage
Z = Input voltage (blank if 12VDC)

Example:

CTC – 30: Maximum output = +/- 1,500V 12 VDC input

CTC – 10 /5Vin: Maximum output = +/- 500V 5VDC input

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