

## **CT Series Mini-Sized Modules**

## **HIGH VOLTAGE POWER SUPPLY**



The CT Series high voltage power supplies offer one to generate both positive and negative potentials at the same time. The output voltage of the CT power supply is directly proportional to the input voltage and both voltages track each other. The output ripple is of each side mis typically less than 1% at full power. The output section is fully floating and isolated from the input by over 1T Ohm (@ 25 deg C) with less than 50 pF of coupling capacitance. The CT unit has an internal bleeder resistor on each output for safety. The value of the resistor is such that it dissipates less than 0.05 watts at full output voltage. All CT's are reverse input voltage and short circuit protected.

#### TYPICAL APPLICATIONS

General Lab Use Electrostatics Bias Voltage **Op-Amp Supply** Pulse Generator

#### **SPECIFICATIONS**

#### Input Voltage:

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

#### Output Voltage:

From +/-50 VDC to +/- 2,500 VDC See "model selection table"

### Output Polarity:

Output is floating from input

#### Output Current:

depends upon power level See "model selection table"

## CT Series – center tapped Mini-Sized Modules

- Output proportional to Input
- Split Supply (positive and negative)
- +/- 50 VDC to +/- 2,500 VDC available
- 1.5, 3 and 5 Watt power levels

#### **SPECIFICATIONS Continued**

#### Voltage Regulation

10% NL - FL (typical) Resistive load

1% maximum at full load each side

#### Temperature Coefficient:

100 ppm/ °C

< 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:

1.5 W Module 12 Vin: 175 mA 3 W Module 12 Vin: 375 mA 5 W Module 12 Vin: 575 mA

#### Power Efficiency:

70% typical

#### **Encapsulation:**

Epoxy potting

#### **Short Circuit Ability:**

Fold-back circuitry

#### Switching Frequency:

Typical 30kHz



# SC Series Mini-Sized Modules

# HIGH VOLTAGE POWER SUPPLY

#### **SPECIFICATIONS Continued**

#### Cooling:

Convection: 3W module = 15 ° C case temperature rise 5W module = 25 ° C case temperature rise

#### **Dimensions:**

2.5 L x 1.5 W x 0.75 H (63.5mm x 38.1mm x 19.1mm)

#### Weight:

4.3 oz (120 grams)

#### **Encapsulation:**

**Epoxy potting** 

#### Finish:

Smooth Diallyl-Phthalate Thermoset Case

#### Terminations:

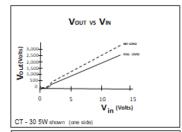
Electro-Gold Plated Brass pins (4)

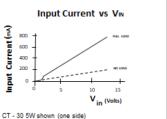
#### MODEL SELECTION TABLE

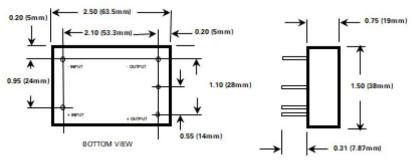
Model	Voltage	Power Available	
CT-1	±/ 50v	1.5w 3w	5w
C1-1	T/- 30V	1.5W 5W	344
CT-2	+/- 100v	1.5w 3w	5w
CT-3	+/- 150v	1.5w 3w	5w
CT-5	+/- 250v	1.5w 3w	5w
CT-10	+/- 500v	1.5w 3w	5w
CT-20	+/- 1kv	1.5w 3w	5w
CT-30	+/- 1.5kv	1.5w 3w	5w
CT-40	+/- 2kv	1.5w 3w	5w
CT-50	+/- 2.5kv	1.5w 3w	5w

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

#### **PERFORMANCE CHARTS**









0.062(1.6mm)

TOP VIEW

RECCOMENDED SOLDER PAD DIMENSIONS

### **Ordering Information:**

CT - XX Y Watt / Z

XX = Output voltage Y = Maximum power

Z = Input voltage (blank if 12VDC)

#### **Example:**

CT - 30 5W: Maximum output = +/- 1,500 V 5Watts 12 VDC input CT - 10 3W/5V: Maximum output = +/- 500 V 3Watts 5VDC input

HIGH VOLTAGE

for the WORLD

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American High Voltage is an ISO 9001 company

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