



AC Series – AC output Mini-Sized Modules

- Output proportional to Input
- Encapsulated
- 1kV to 4kV peak-to-peak
- 1.5, 3, 5 Watt power levels

The AC Series is a broad line of mini-sized, high reliability DC to AC converters supplying up to 4,000 volts peak-peak. These converters are ideal for applications requiring minimal size and weight where a source of AC voltage is needed. The output is directly proportional to the input voltage and is linear from 0.9V input to maximum input voltage, allowing for an easily adjustable output. Power levels are up to 5 Watts depending on the model. All AC modules are reverse input voltage and short circuit protected.

TYPICAL APPLICATIONS

General Lab Use
Multiplier Feed
Corona Generator
Ion Removal
Static Build-up Dissipation

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 1kV to 4kV peak to peak

Frequency of Operation:

30kHz (depends upon load)

Output Polarity:

Output is AC and floating from input

Output Current:

depends upon power level
See "model selection table"

SPECIFICATIONS Continued

Voltage Regulation

10% NL – FL (typical) Resistive load

Capacitive Load:

Do not exceed maximum current @ 30kHz

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:

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



AMERICAN HIGH VOLTAGE

AC 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

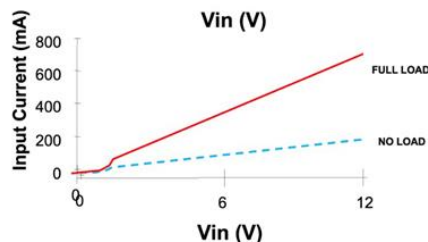
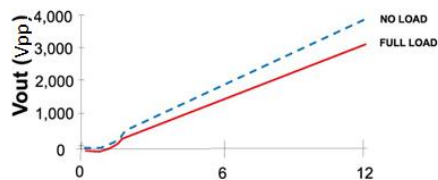
Finish:

Smooth Diallyl-Phthalate Thermoset Case

Terminations:

Gold Plated Brass pins (4)

PERFORMANCE CHARTS

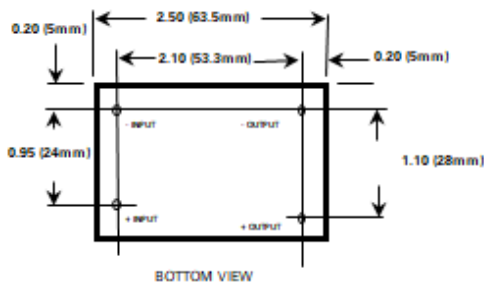


MODEL SELECTION TABLE

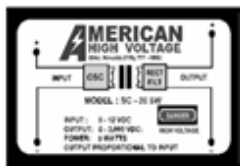
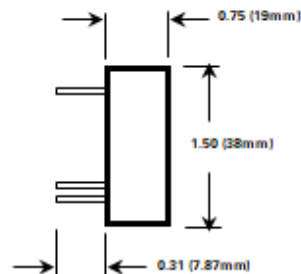
Model	Voltage	Power Available
AC-10	0 – 1000Vpp	1.5w 3w 5w
AC-20	0 – 2000Vpp	1.5w 3w 5w
AC-30	0 – 3000Vpp	1.5w 3w 5w
AC-40	0 – 4000Vpp	1.5w 3w 5w

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

AC-40 5W shown



BOTTOM VIEW



TOP VIEW



RECOMMENDED SOLDER PAD DIMENSIONS

Ordering Information:

AC – XX Y Watt / Z

XX = Output voltage 10 = 1kVpp

Y = Maximum power

Z = Input voltage (blank if 12VDC)

Example:

AC – 30 5W: Maximum output = 3,000 Vpp 5 Watts 12 VDC input

AC – 20 3W/5V: Maximum output = 2,000 Vpp 3Watts 5VDC input

HIGH VOLTAGE
for the
WORLD

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