



# Endicott Research Group, Inc.

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<http://www.ergpower.com>

# E3167

## Specifications and Applications Information

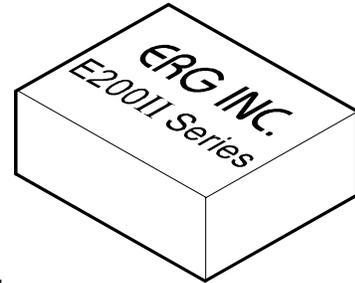
09/09/05

Preliminary

The E3167 (E200II Series) dc to ac inverter is specifically designed to power the Kyocera KCG057QV1DB-G50 CCFL to a moderate brightness level from a +5 volt dc source.

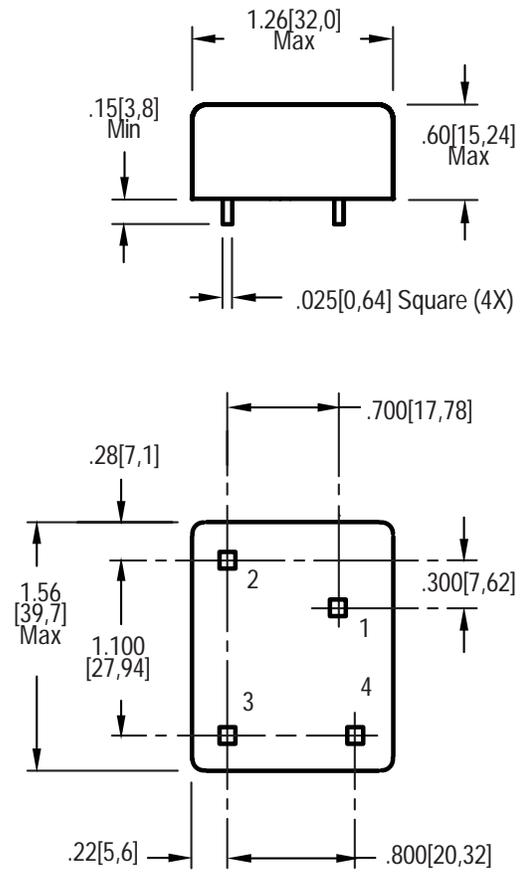
The E3167's small size and encapsulated package makes it the ideal power source for applications where small size, high efficiency and reliability are critical.

## Single Lamp DC to AC Inverter

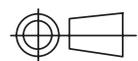


E200 Package

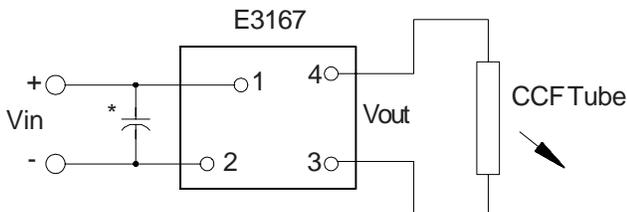
### Package Configuration



- 1. Vin(+)
- 2. Vin(-)
- 3. Vout(AC)
- 4. Vout(AC)



### Connection Diagram



\* Input bypass capacitor may be required (10uf - 100uf)

**Absolute Maximum Ratings**

Rating	Symbol	Value	Units
Input Voltage Range	Vin	-0.3 to +5.5	Vdc
Operating Temperature	To	0 to +70	°C
Storage Temperature	Tstg	-40 to +85	°C

**Absolute Maximum Ratings**

Rating	Symbol	Value	Units
Input Voltage	Vin	+4.9 to 5.25	Vdc

**Electrical Characteristics**

Unless otherwise noted Vin = +5.0 Volts dc and Ta = 25°C

Characteristic	Symbol	Min	Typ	Max	Units
Input Current	Iin	-	.67	.77	Adc
Operating Frequency	Fo	28	33	38	KHz
Minimum Output Voltage	Vout (min)	1500	-	-	Vrms
Efficiency	-	-	86	-	%
Output Current	Iout	-	4.2	-	marms
Output Voltage (When powering a load simulating the referenced display)	Vout	-	685	-	Vrms

After tube has be allowed to warm-up for 5 minutes

Specifications subject to change without notice.

**Application Notes:**

- 1) Printed circuit boards should be free of traces beneath the inverter.
- 2) The minimum creepage from high voltage areas of the inverter to any conductive material should be .00012 inches per volt of starting voltage.
- 3) The minimum clearance from high voltage areas of the inverter to any conductive material should be .000167 inches per volt of starting voltage.
- 4) Contact ERG for possible exceptions.



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