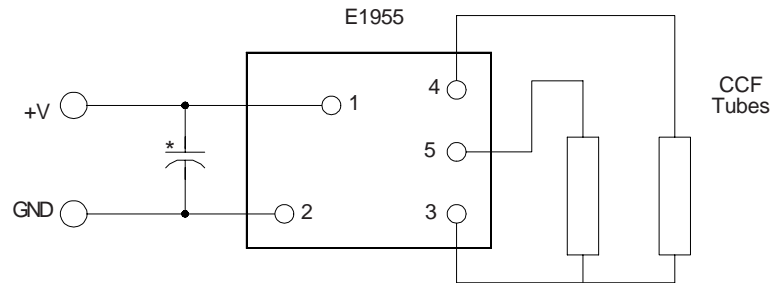
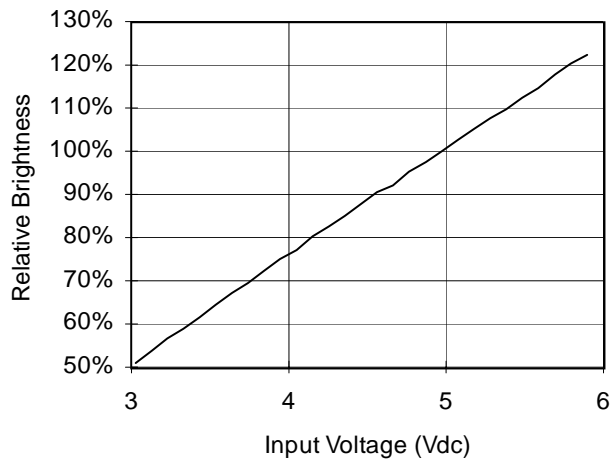


# E1955



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

Relative Brightness vs. Input Voltage



**Endicott Research Group, Inc.**  
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Made in U.S.A.



**Endicott Research Group, Inc.**  
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## Specifications and Applications Information

5/16/97

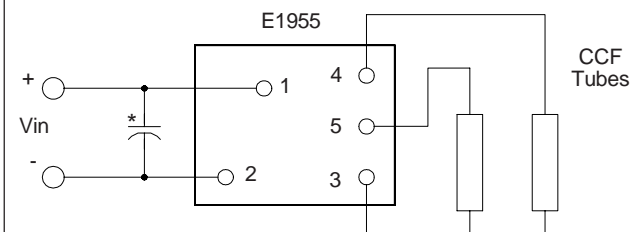
Preliminary

The E1955 (E200II Series) dc to ac inverter is specifically designed to power the Sharp LQ10D421 LCD display to a moderate brightness level from a +5 volt dc source.

The E1955's small size and encapsulated package makes it the ideal power source for applications where small size, high efficiency and reliability are critical.

This inverter is designed to satisfy the most common cold-cathode lighting requirements for the Sharp LQ10D421 LCD display. Custom units, providing different inputs, outputs or package refinements are available.

### Connection Diagram



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

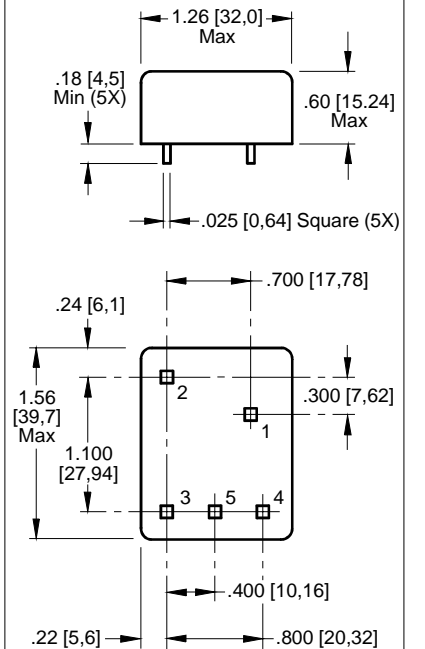
# E1955

## Two Tube DC to AC Inverter



E200 Package

### Package Configuration



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



# E1955

## Absolute Maximum Ratings

Rating	Symbol	Value	Units
Input Voltage Range	V <sub>in</sub>	-0.3 to +6	Vdc
Operating Temperature	T <sub>o</sub>	0 to +70	°C
Storage Temperature	T <sub>stg</sub>	-40 to +85	°C

## Recommended Operating Conditions

Rating	Symbol	Value	Units
Input Voltage	V <sub>in</sub>	+3.5 to 5.5	Vdc

## Electrical Characteristics

Unless otherwise noted V<sub>in</sub> = 5.00 Volts dc and T<sub>a</sub> = 25°C.

Characteristic	Symbol	Min	Typ	Max	Units
Input Current	I <sub>in</sub>	-	1.5	1.7	A <sub>dc</sub>
Operating Frequency	F <sub>o</sub>	34	39	44	KHz
Minimum Output Voltage	V <sub>out</sub> (min)	1200	-	-	V <sub>rms</sub>
Inverter Efficiency	η	-	85	-	%
Tube Operating Current (per tube)	I <sub>o</sub>	-	6.0	-	ma <sub>rms</sub>
Tube Sustaining Voltage ** (per tube in the Sharp LQ10D421 Display)	V <sub>s</sub>	-	515	-	V <sub>rms</sub>

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

\*\* Measured, not guaranteed.  
Specifications subject to change without notice

# E1955

## Typical Performance Curves

