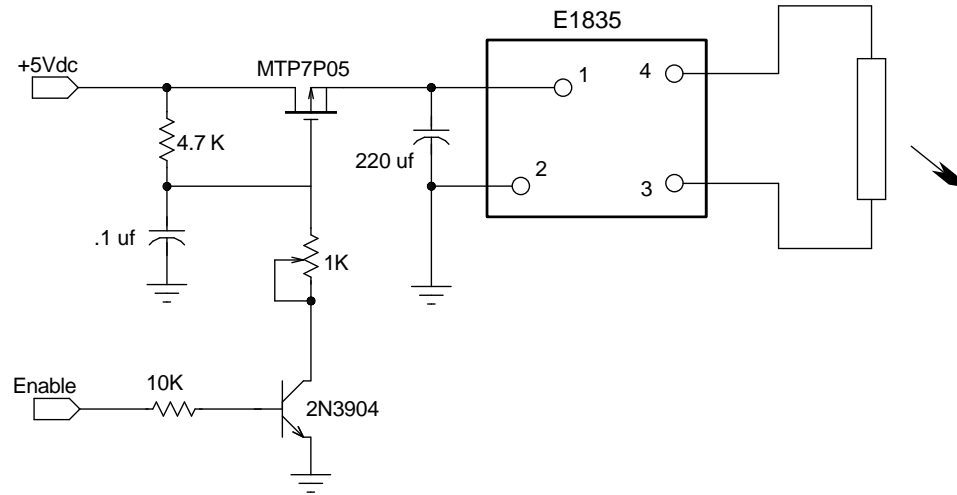
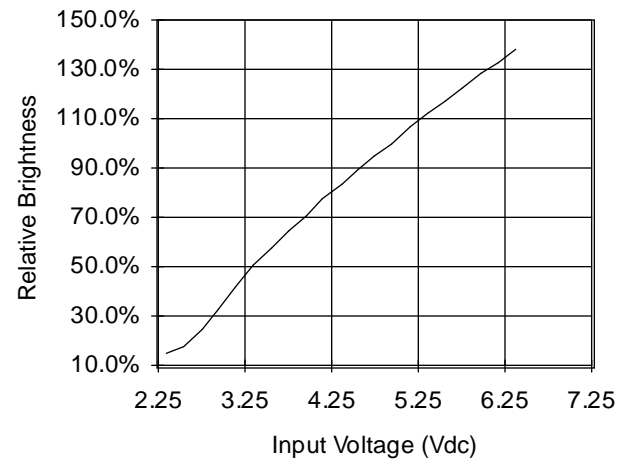


# E1835



**Optional Dimming Circuit with Enable**

Relative Brightness vs. Input Voltage



**Endicott Research Group, Inc.**

2601 Wayne St., Endicott NY 13760  
607-754-9187 607-754-9255

Made in U.S.A.



**Endicott Research Group, Inc.**

2601 Wayne St., Endicott NY 13760  
607-754-9187 Fax 607-754-9255

## Specifications and Applications Information

3/27/96

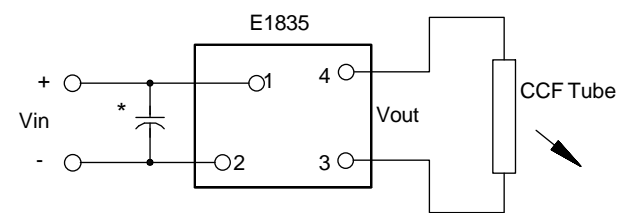
Preliminary

The E1835 (E200II Series) dc to ac inverter is specifically designed to power the Hitachi LMG7550 LCD display to a moderate brightness level from a +5 volt dc source.

The E1835's small size, encapsulated package and low input power requirements (typically 2.4 watts) makes it the ideal power source for battery applications where small size, high efficiency and reliability are critical.

This standard inverter is designed to satisfy the most common cold-cathode lighting requirements for the LMG7550 display. Custom units, providing different inputs, outputs or package refinements are available.

### Connection Diagram



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

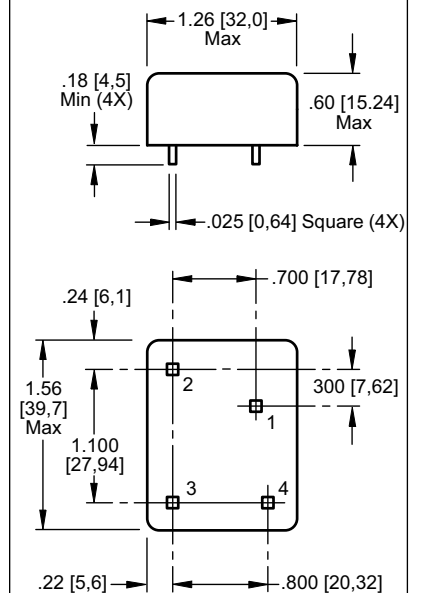
# E1835

## Single Tube DC to AC Inverter



E200II Package

### Package Configuration



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



# E1835

## Absolute Maximum Ratings

Rating	Symbol	Value	Units
Input Voltage Range	Vin	-0.3 to +6	Vdc
Operating Temperature	To	0 to +70	°C
Storage Temperature	Tstg	-40 to +85	°C

## Recommended Operating Conditions

Rating	Symbol	Value	Units
Input Voltage	Vin	+2.5 to 5.5	Vdc

## Electrical Characteristics

Unless otherwise noted Vin = 5.00 Volts dc and Ta = 25°C

Characteristic	Symbol	Min	Typ	Max	Units
Input Current	Iin	-	0.5	0.57	A <sub>dc</sub>
Operating Frequency	Fo	30	35	40	KHz
Minimum Output Voltage	Vout (min)	1000	-	-	V <sub>rms</sub>
Efficiency	η	-	78	-	%
Output Current	Iout	-	4.5	-	mA <sub>rms</sub>
Output Voltage (When Powering an Hitachi LMG7550 display)	Vout	-	435	-	V <sub>rms</sub>

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

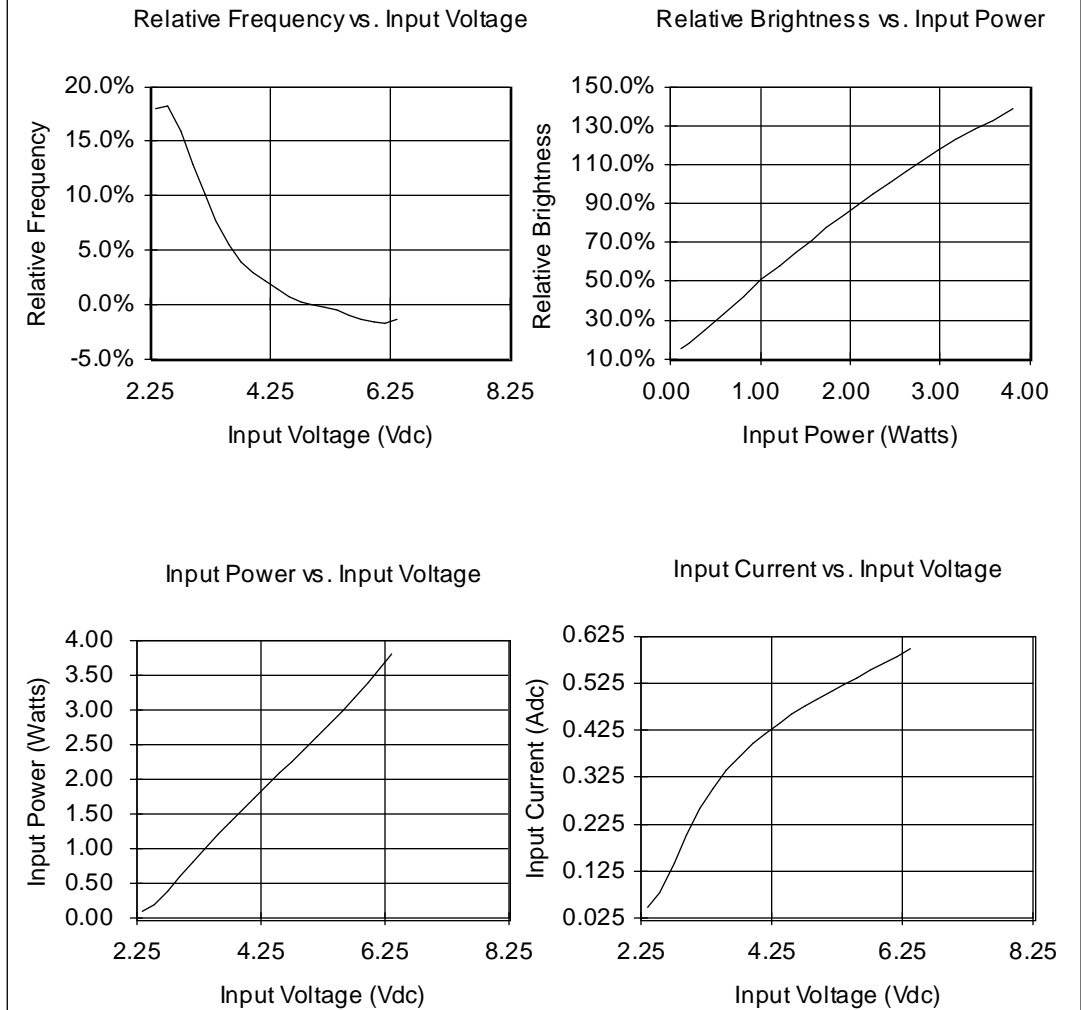
Specifications subject to change without notice



Endicott Research Group, Inc.

# E1835

## Typical Performance Curves



Endicott Research Group, Inc.