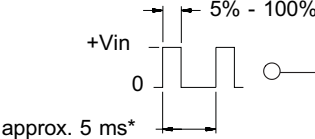
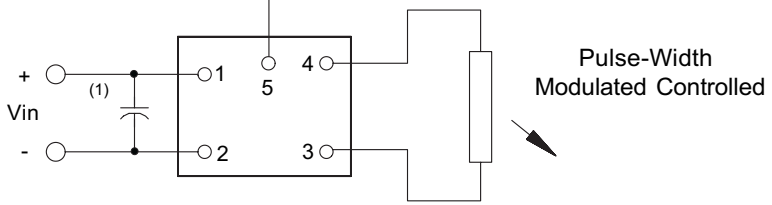


E2027C

3 Dimming Options

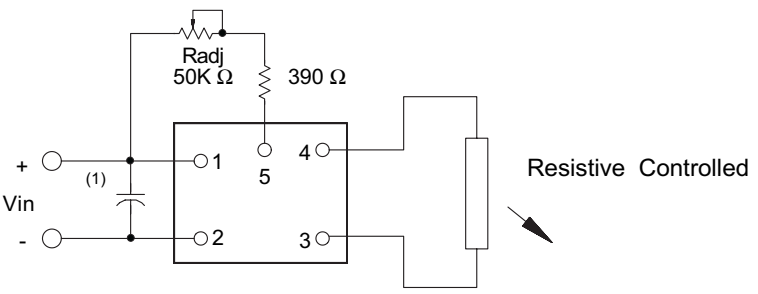


* should be selected to be compatible with LCD and display driver



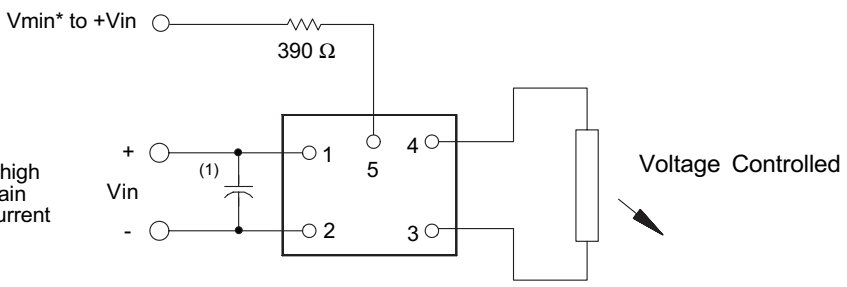
Pulse-Width Modulated Controlled

* value should be low enough to maintain minimum tube current at minimum brightness



Resistive Controlled

* Vmin should be high enough to maintain minimum tube current



Voltage Controlled

Note 1 Input bypass capacitor (10uf - 100uf) may be required to reduce reflected ripple



Endicott Research Group, Inc.
2601 Wayne St., Endicott NY 13760
607-754-9187



Endicott Research Group, Inc.
2601 Wayne St., Endicott NY 13760
607-754-9187 Fax 607-754-9255
<http://www.ergpower.com>

Specifications and Applications Information

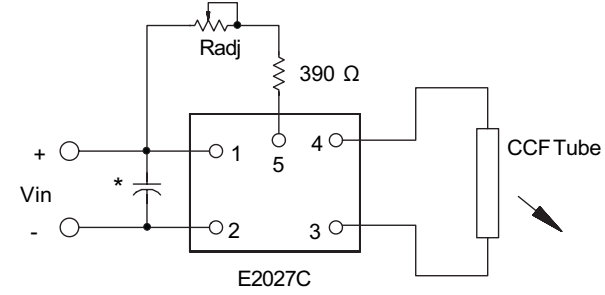
03/21/01 Preliminary

The ERG E2027C (E200II Series) dc to ac inverter is specifically designed to power the Hitachi SP14Q001 LCD display module to a moderate brightness level from a +5 volt dc source.

The E2027C's small size, encapsulated package and low input power requirements 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 SP14Q001 display. Custom units, providing different inputs, outputs or package refinements are available.

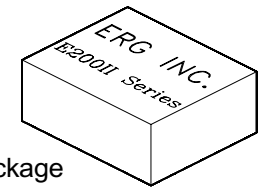
Connection Diagram



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

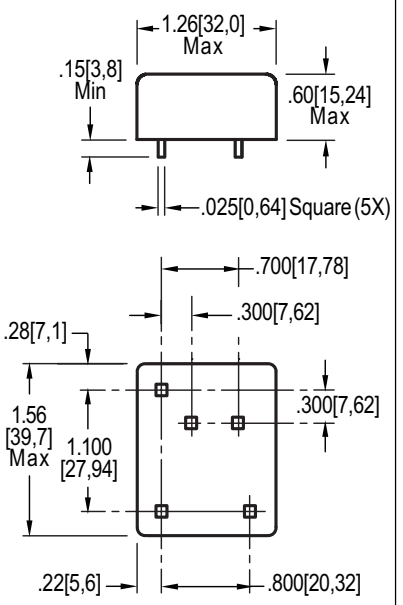
E2027C

Single Tube DC to AC Inverter

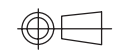


E200 Package

Package Configuration



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



E2027C

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

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	-	.42	.48	Adc
Operating Frequency	Fo	28	33	38	KHz
Minimum Output Voltage	Vout (min)	1100	-	-	Vrms
Efficiency	η	-	71	-	%
Output Current per tube	Iout	-	5	-	marms
Output Voltage (when Powering a Hitachi SP14Q001 display)	Vout	-	300	-	Vrms
Pin5 Input Current Requirement	-	-	13	-	madc

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

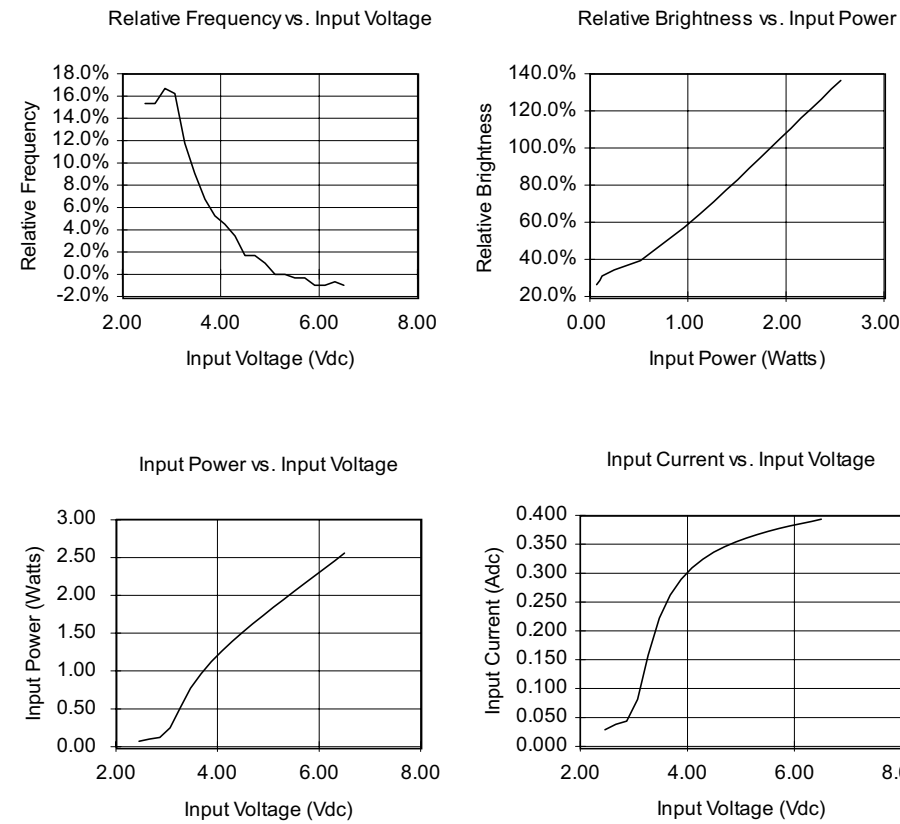
Specifications subject to change without notice.



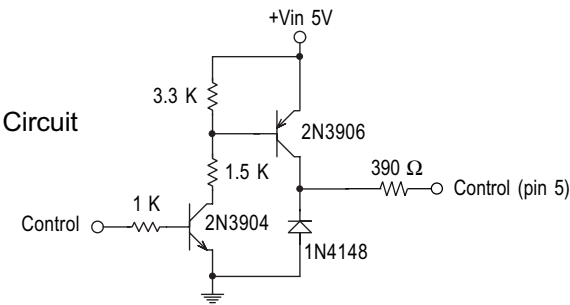
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Typical Performance Curves

E2027C



Disable Circuit



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