

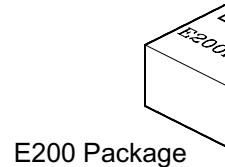
Specifications and Applications Information

10/17/97

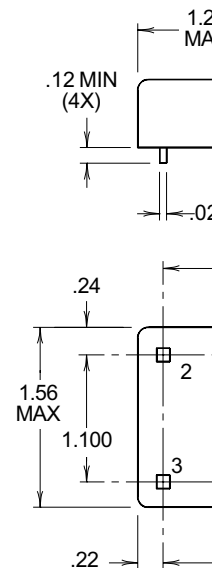
Preliminary

E202

Single T
DC to AC I

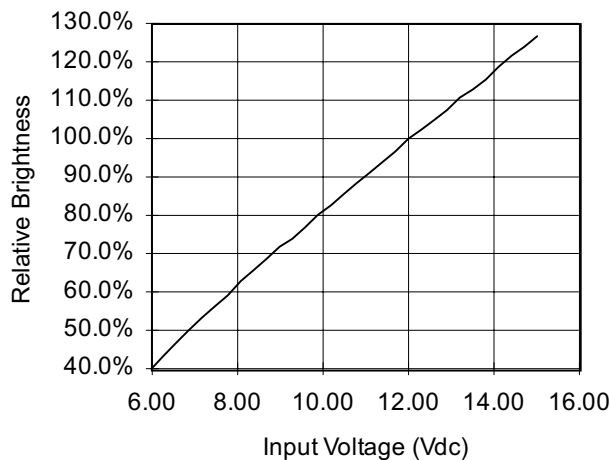


Package Con



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

Relative Brightness vs. Input Voltage

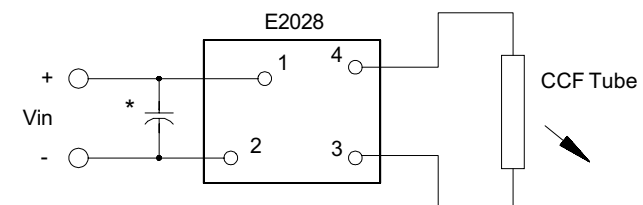


The ERG E2028 (E200II Series) dc to ac inverter is specifically designed to power the Hitachi SP14Q001 LCD display module to a moderate brightness level from a +12 volt dc source.

The E2028's small size, encapsulated package and low input power requirements (typically 1.7 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 SP14Q001 display. Custom units, providing different inputs, outputs or package refinements are available.

Connection Diagram



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

Maximum Ratings

Rating	Symbol	Value	Units
Operating Voltage Range	V _{in}	-0.3 to +15	V _{dc}
Operating Temperature	T _o	0 to +70	°C
Storage Temperature	T _{stg}	-40 to +85	°C

Recommended Operating Conditions

Rating	Symbol	Value	Units
Operating Voltage	V _{in}	+6 to 13.2	V _{dc}

Characteristics

Unless otherwise noted V_{in} = 12.00 Volts dc and T_a = 25°C

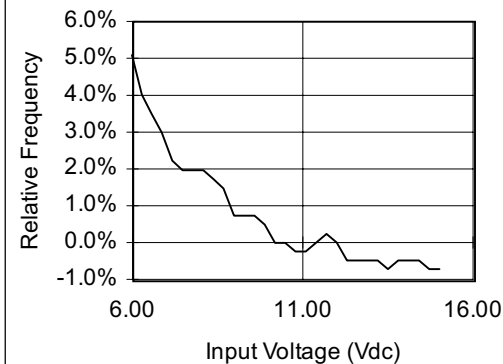
Characteristic	Symbol	Min	Typ	Max	Units
Linearity	lin	-	0.145	0.17	Adc
Frequency	F _o	32	37	42	KHz
Output Voltage	V _{out} (min)	1100	-	-	V _{rms}
Efficiency	η	-	86	-	%
Output Current	I _{out}	-	5	-	mA _{rms}
Output Voltage (When Display is on)	V _{out}	-	300	-	V _{rms}

When allowed to warm-up for 5 minutes

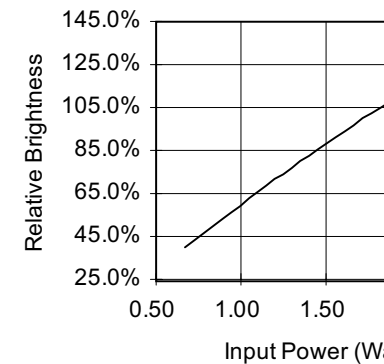
Specifications subject to change without notice

Typical Performance Curves

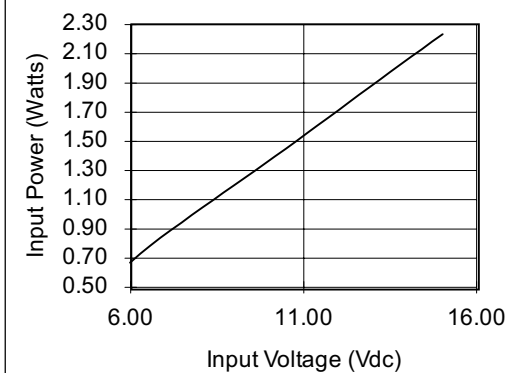
Relative Frequency vs. Input Voltage



Relative Brightness vs. Input Power (W)



Input Power vs. Input Voltage



Input Current vs. Input Voltage (Vdc)

