E2639

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

Made in U.S.A.

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

E2639

Specifications and Applications Information

02/05/02 Preliminary

Single Tube DC to AC Inverter

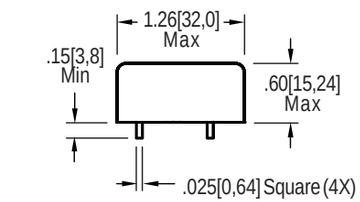
E200 Package

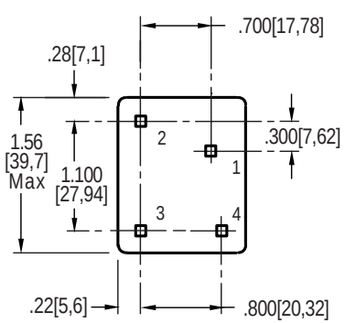
The E2639 (E200II Series) dc to ac inverter is specifically designed to power the Optrex DMF50036 display to a lower than nominal brightness level from a +12 volt dc source.

The E2639'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 Optrex DMF50036 display. Custom units, providing different inputs, outputs or package refinements are available.

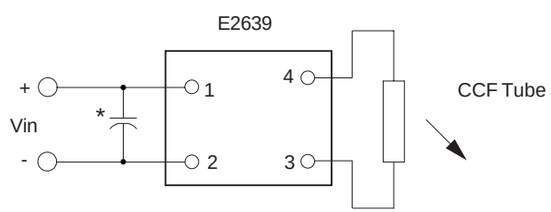
Package Configuration





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 +14	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	+8.0 to13.2	Vdc

Electrical Characteristics

Unless otherwise noted Vin = 12.00 Volts dc and Ta = 25°C

Characteristic	Symbol	Min	Typ	Max	Units
Input Current	Iin	-	.21	.25	Adc
Operating Frequency	Fo	25	30	40	KHz
Minimum Output Voltage	Vout (min)	1100	-	-	Vrms
Efficiency	-	-	85	-	%
Output Current	Iout	-	5	-	marms
Output Voltage (When powering a load simulating the referenced display)	Vout	-	390	-	Vrms

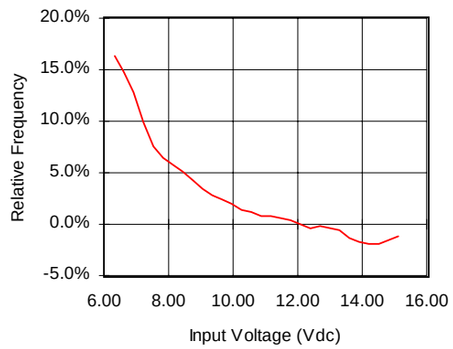
After tube has be allowed to warm-up for 5 minutes

Specifications subject to change without notice.

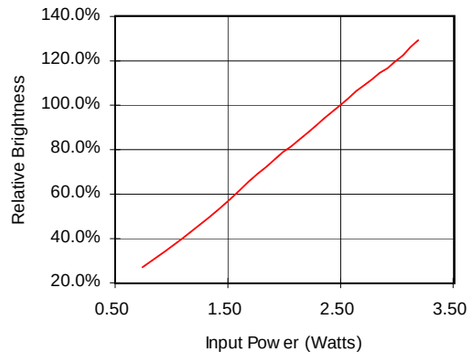
Endicott Research Group, Inc.

Typical Performance Curves

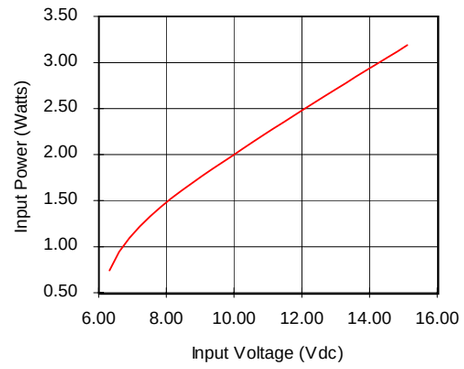
Relative Frequency vs. Input Voltage



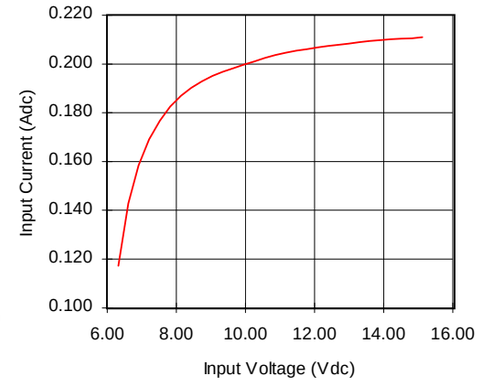
Relative Brightness vs. Input Power



Input Power vs. Input Voltage



Input Current vs. Input Voltage



Endicott Research Group, Inc.