



Endicott Research Group, Inc.

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E2038

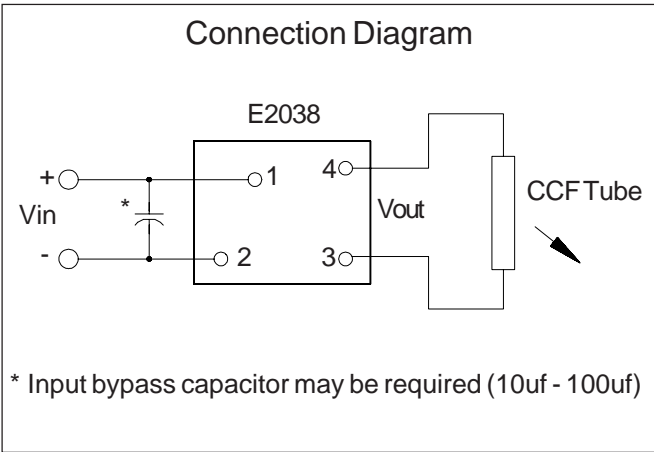
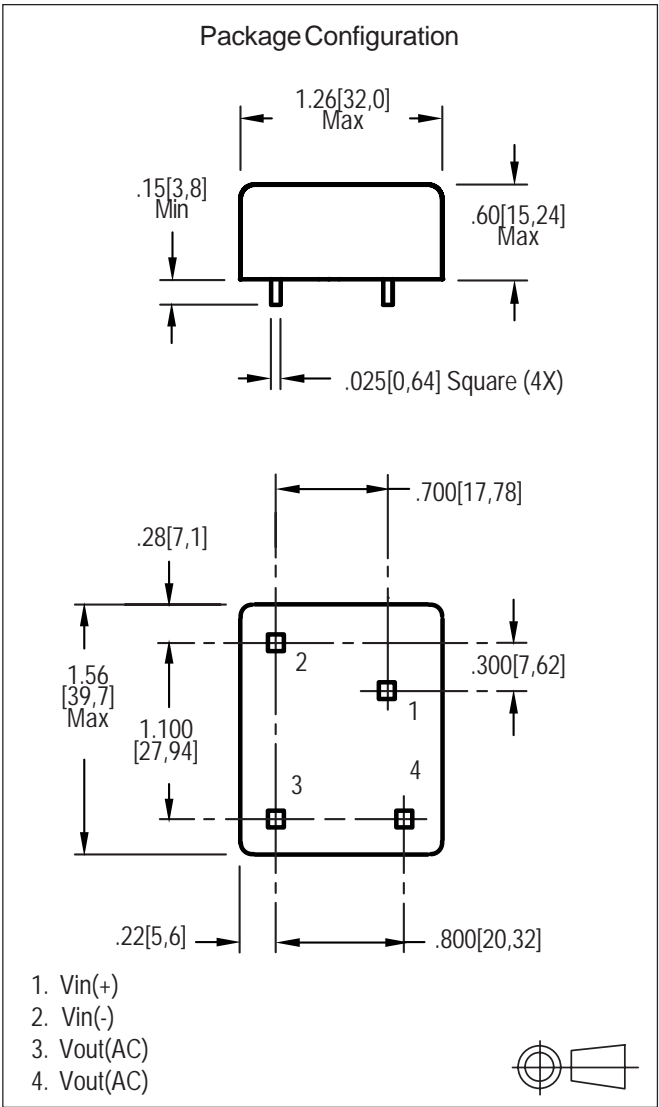
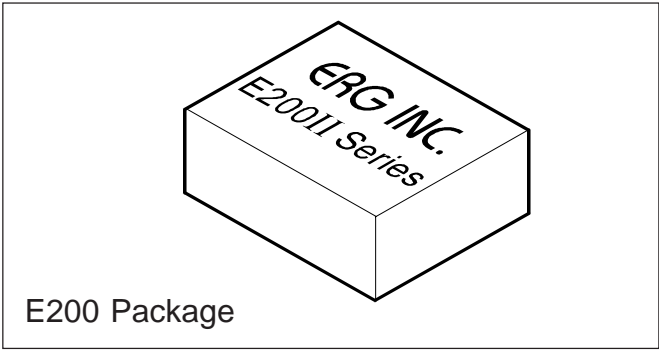
Specifications and Applications Information

05/24/04Preliminary

The E2038 (E200II Series) dc to ac inverter is specifically designed to power the Sharp LQ5AW116 LCD display to a moderate brightness level from a +5 volt dc source.

The E2038's small size and encapsulated package makes it the ideal power source for applications where small size, high efficiency and reliability are critical.

Single Tube DC to AC Inverter



Absolute Maximum Ratings

Rating	Symbol	Value	Units
Input Voltage Range	V _{in}	-0.3 to +6.0	V _{dc}
Operating Temperature	T _o	0 to +70	°C
Storage Temperature	T _{stg}	-40 to +85	°C

Absolute Maximum Ratings

Rating	Symbol	Value	Units
Input Voltage	V _{in}	+4.50 to 5.25	V _{dc}

Electrical Characteristics

Unless otherwise noted V_{in} = 5.00 Volts dc and T_a = 25°C

Characteristic	Symbol	Min	Typ	Max	Units
Input Current	I _{in}	-	.375	.400	A _{dc}
Operating Frequency	F _o	34	39	44	KHz
Minimum Output Voltage	V _{out} (min)	1350	-	-	V _{rms}
Efficiency	-	-	86	-	%
Output Current	I _{out}	-	6.5	-	ma _{rms}
Output Voltage (When powering a Sharp LQ5AW116 display)	V _{out}	-	585	-	V _{rms}

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

Specifications subject to change without notice.

Application Notes:

- 1) Printed circuit boards should be free of traces beneath the inverter.
- 2) The minimum distance from high voltage areas of the inverter to any conductive material should be .12 inches per kilovolt of starting voltage.
- 3) Contact ERG for possible exceptions.



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