



Endicott Research Group, Inc.

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Specifications and Applications Information

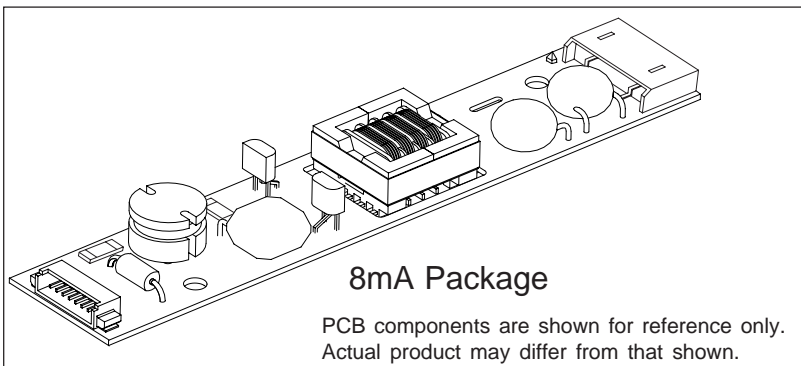
04/23/04

Preliminary

The ERG 8mA23089 (8m Class) low profile dc to ac inverter is specifically designed to power the NEC NL10276BC30-24D display module to a moderate brightness level from a +12 volt dc source.

This low profile inverter features:

- ✓ Less Than 8 mm in Height
- ✓ LCD Module Specific
- ✓ Display Compatible Output Connector
- ✓ Firm Specifications
- ✓ Application Information
- ✓ Designed, Manufactured and Supported in the USA
- ✓ Custom Input and Output Voltages
- ✓ Flexible System Interface
- ✓ Notebook Display Head Compatible



Connectors

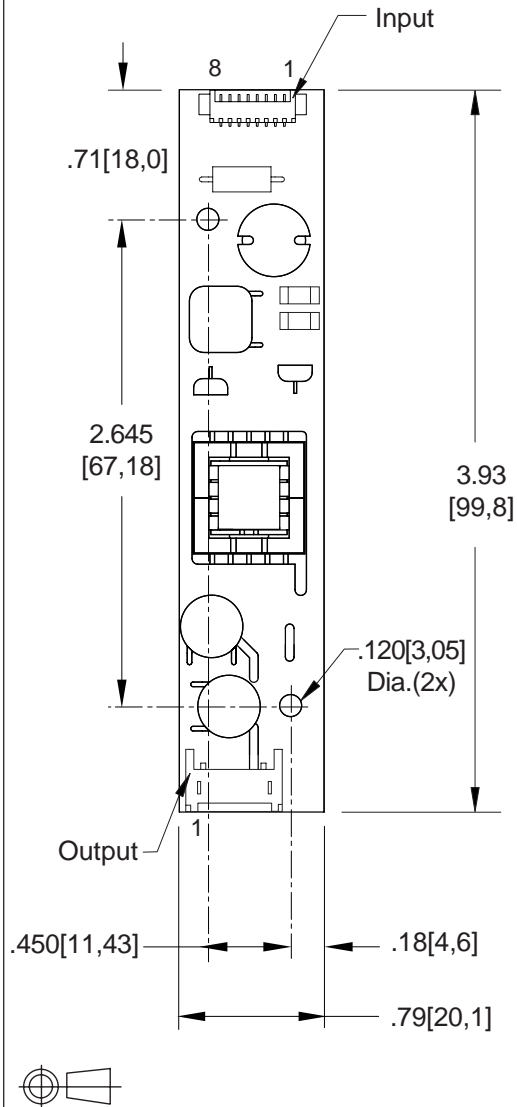
Input J1
Molex 53261-0890

Output J2
JST SM04(4.0)B-BHS-1-TB

8mA23089

Two Tube DC to AC Inverter

Package Configuration



Pin Descriptions

J1-1 Vin	J2-1 ACout
J1-2 Vin	J2-2 ACout
J1-3 GND	J2-3 ACcommon
J1-4 GND	J2-4 ACcommon
J1-5 Control	
J1-6 N/C	
J1-7 N/C	
J1-8 GND	

**Absolute Maximum Ratings**

Rating	Symbol	Value	Units
Input Voltage Range	Vin	-0.3 to +13.2	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	+10.8 to 12.6	Vdc

Electrical Characteristics

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

Characteristic	Symbol	Min	Typ	Max	Units
Input Current	Iin	-	.81	.94	Adc
Operating Frequency	Fo	33	38	43	KHz
Minimum Output Voltage	Vout (min)	1500	-	-	Vrms
Efficiency	-	-	84	-	%
Output Current	Iout	-	6	-	marms
Output Voltage (When powering a load simulating the referenced display)	Vout	-	680	-	Vrms
Pin5 Input Current Requirement	-	-	10	-	madc

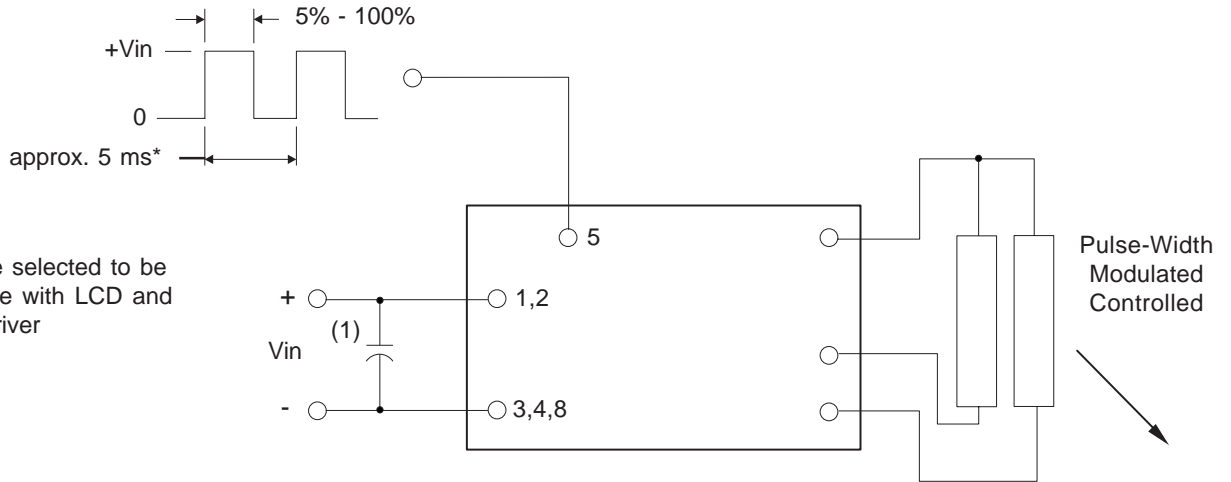
After tube has been allowed to warm-up for 5 minutes
External Disable Circuit shown on page 3.

Specifications subject to change without notice.

Input voltage specification modified for clarity 4/2004.



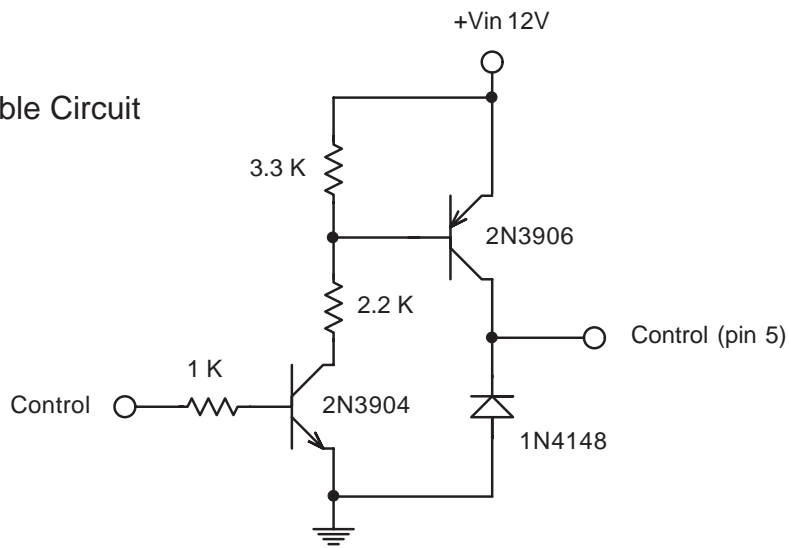
Dimming Option



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

Note 1 Input by-pass capacitor (25 uf - 100uf) may be required to reduce reflected ripple.

Disable Circuit



Endicott Research Group, Inc. (ERG) reserves the right to make changes in circuit design and/or specifications at any time without notice. Accordingly, the reader is cautioned to verify that data sheets are current before placing orders. Information furnished by ERG is believed to be accurate and reliable. However, no responsibility is assumed by ERG for its use.