



Endicott Research Group, Inc.

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

L3052

8m Class DC to AC Inverter

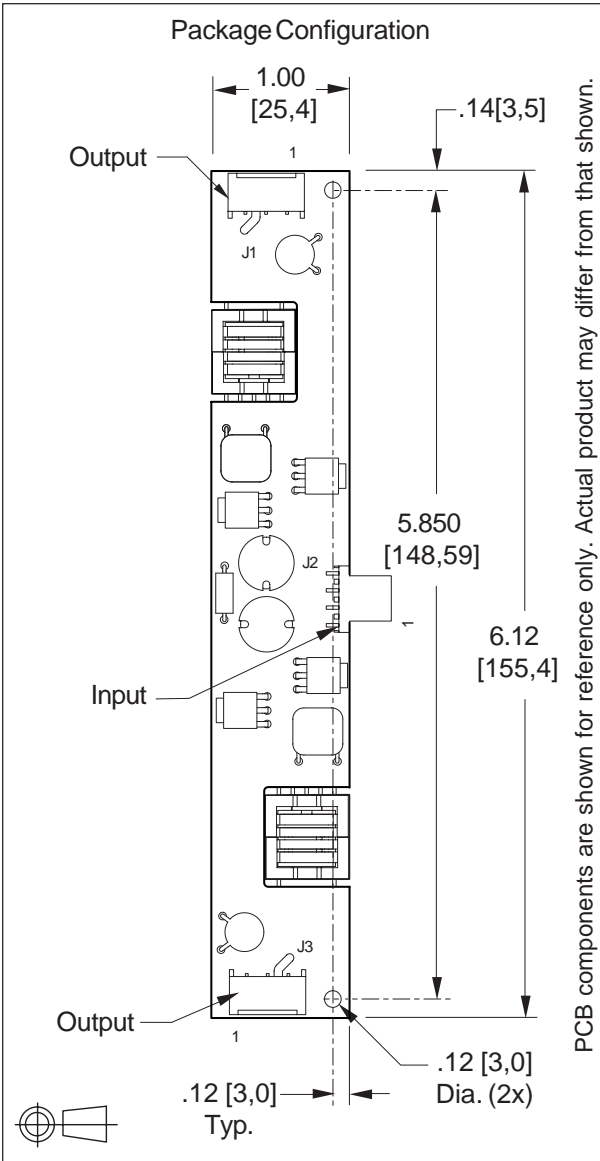
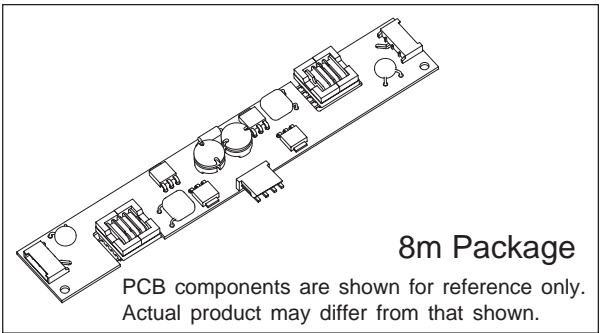
Specifications and Applications Information

04/23/04 Preliminary

The ERG L3052 (8m Class) low profile dc to ac inverter is specifically designed to power the Sanyo TM121SV-02L11 LCD display module to a moderate brightness level from a +5 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 Connector | | Output Connector | |
| Molex 22-05-3041 | | JST SM02(8.0)B-BHS-1-TB | |
| J2-1 | Vin(+) | J1-1 ACout | J3-1 ACout |
| J2-2 | GND | J1-2 N/C | J3-2 N/C |
| J2-3 | Control | J1-3 ACout | J3-3 ACout |
| J2-4 | N/C | | |

Absolute Maximum Ratings

| Rating | Symbol | Value | Units |
|-----------------------|------------------|--------------|-------|
| Input Voltage Range | V _{in} | -0.3 to +5.5 | Vdc |
| Operating Temperature | T _o | -0 to +70 | °C |
| Storage Temperature | T _{stg} | -40 to +85 | °C |

Recommended Operating Conditions

| Rating | Symbol | Value | Units |
|---------------|-----------------|---------------|-------|
| Input Voltage | V _{in} | +4.50 to 5.25 | Vdc |

Electrical Characteristics

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

| Characteristic | Symbol | Min | Typ | Max | Units |
|--|------------------------|------|------|------|-------|
| Input Current ^(note 1) | I _{in} | - | 1.76 | 2.03 | Adc |
| Operating Frequency | F _o | 38 | 43 | 48 | KHz |
| Minimum Output Voltage | V _{out} (min) | 1300 | - | - | Vrms |
| Efficiency | - | - | 77 | - | % |
| Output Current (per tube) | I _{out} | - | 6.0 | - | marms |
| Output Voltage (When powering a load simulating the referenced display) | V _{out} | - | 540 | - | Vrms |
| Pin3 Input Current Requirement ^(note 2) | - | - | 15 | - | madc |

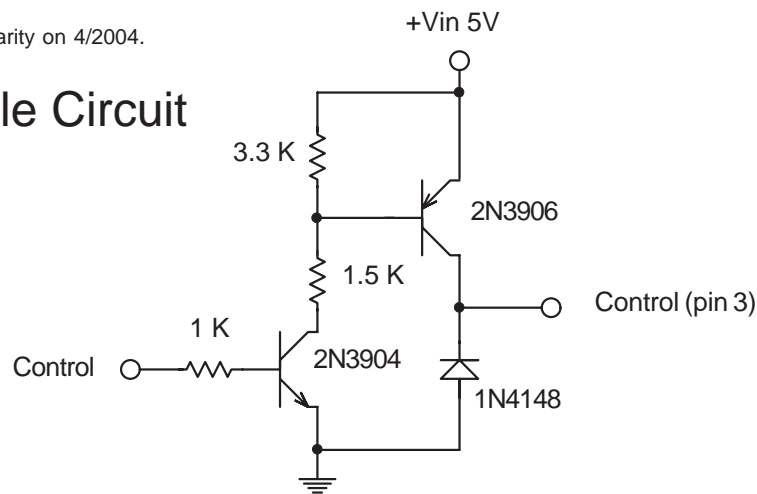
Specifications subject to change without notice.

(Note 1) Input current in excess of maximum may indicate a load/inverter mismatch condition, which can result in reduced reliability. Please contact ERG technical support.

(Note 2) Control Pin Voltage is +Vin ON; GND OFF.

Input voltage specification modified for clarity on 4/2004.

Disable Circuit



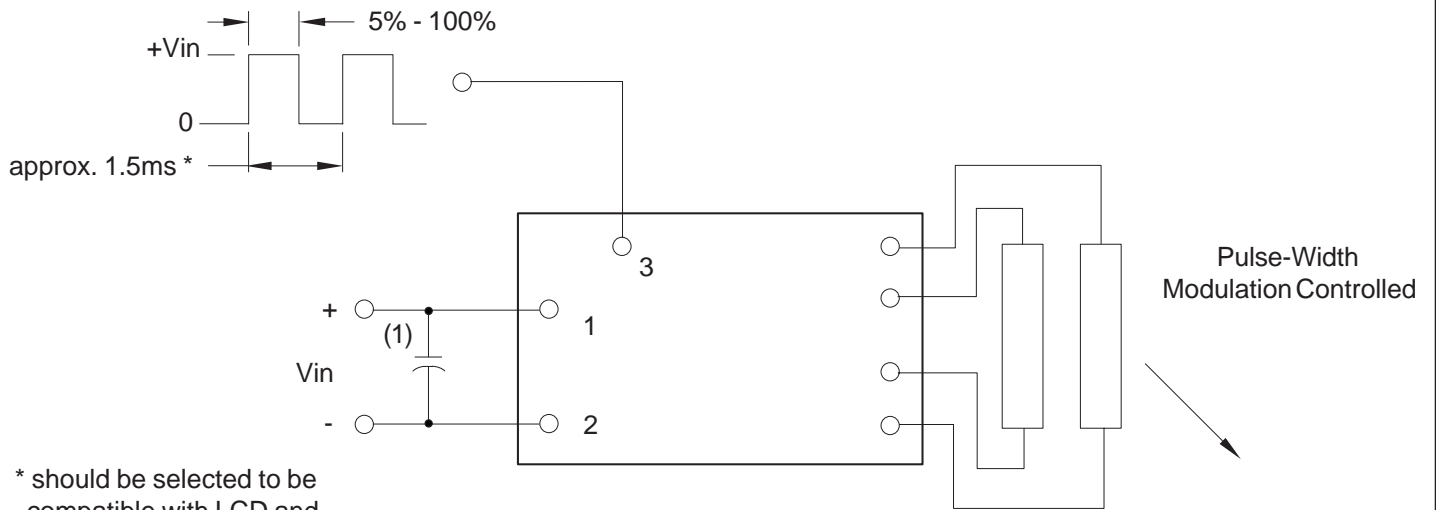
Endicott Research Group, Inc.

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

Made in USA



Dimming Option



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

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



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.