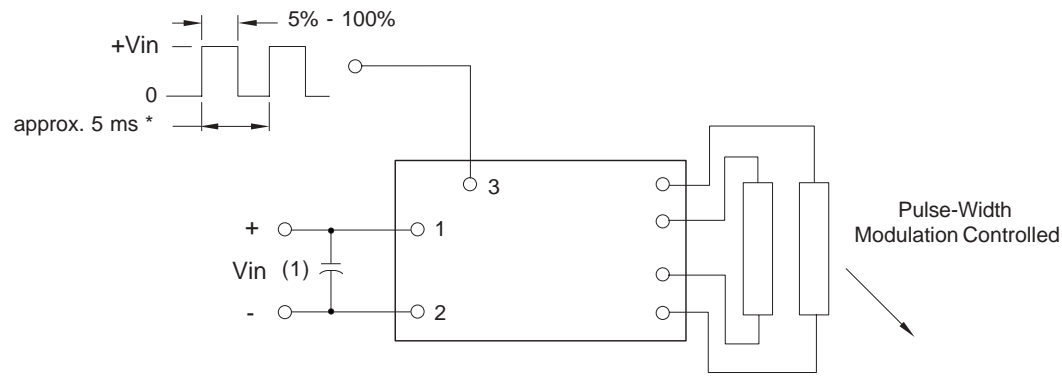


L2499

### 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.**  
 2601 Wayne St., Endicott NY 13760  
 607-754-9187



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

L2499

### 8m Class DC to AC Inverter

### Specifications and Applications Information

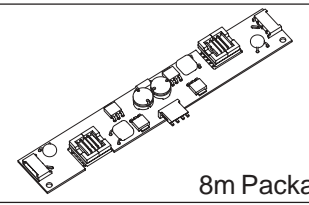
06/03/02

Preliminary

The ERG L2499 (**8m Class**) low profile dc to ac inverter is specifically designed to power the Mitsubishi AA150XA01B LCD display module to a moderate brightness level from a +5 volt dc source.

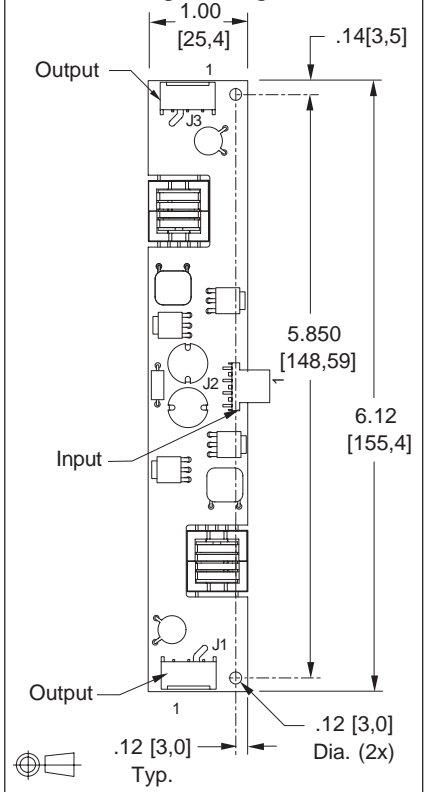
This low profile inverter features:

- ✓ 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



8m Package

#### Package Configuration



#### Pin Descriptions

Input Connector		Output Connectors	
MOLEX 22-05-3041		JST SM02(8.0)B-BHS1TB	
J2-1	Vin	J1-1	ACout
J2-2	GND	J1-2	N/C
J2-3	Control	J1-3	ACcommon
J2-4	N/C	J3-1	ACout
		J3-2	N/C
		J3-3	ACcommon

# L2499

## Absolute Maximum Ratings

Rating	Symbol	Value	Units
Input Voltage Range	V <sub>in</sub>	-0.3 to +6	Vdc
Operating Temperature	T <sub>o</sub>	0 to +70	°C
Storage Temperature	T <sub>stg</sub>	-40 to +85	°C

## Recommended Operating Conditions

Rating	Symbol	Value	Units
Input Voltage	V <sub>in</sub>	+2.5 to 5.5	Vdc

## Electrical Characteristics

Unless otherwise noted V<sub>in</sub> = 5.00 Volts dc and T<sub>a</sub> = 25 °C

Characteristic	Symbol	Min	Typ	Max	Units
Input Current	I <sub>in</sub>	-	2.3	2.7	A <sub>dc</sub>
Operating Frequency	F <sub>o</sub>	41	46	51	KHz
Minimum Output Voltage	V <sub>out</sub> (min)	1500	-	-	V <sub>rms</sub>
Efficiency	η	-	81	-	%
Output Current per tube	I <sub>out</sub>	-	7	-	ma <sub>rms</sub>
Output Voltage (when Powering a load simulating the referenced display)	V <sub>out</sub>	-	665	-	V <sub>rms</sub>
Pin3 Input Current Requirement	-	-	22	-	ma <sub>dc</sub>

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

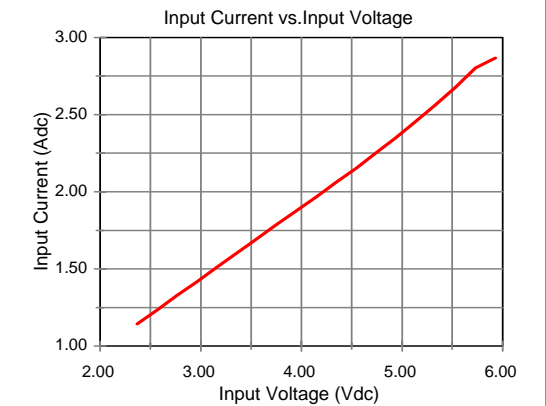
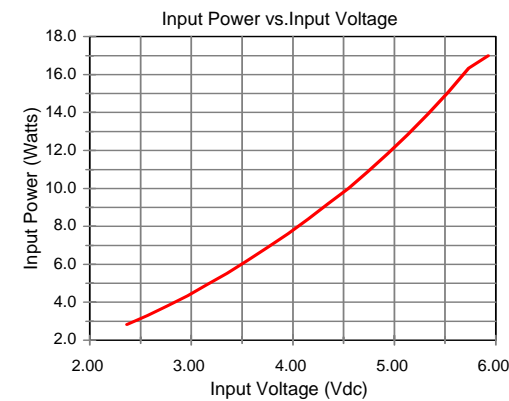
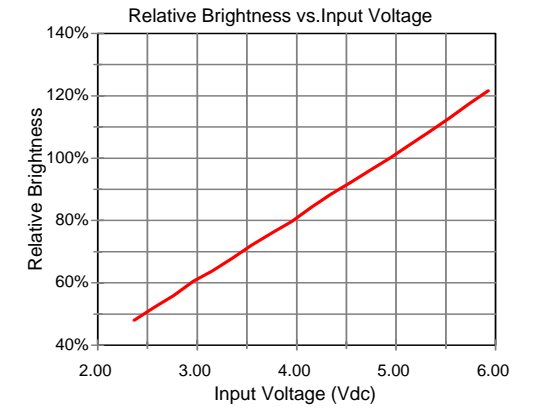
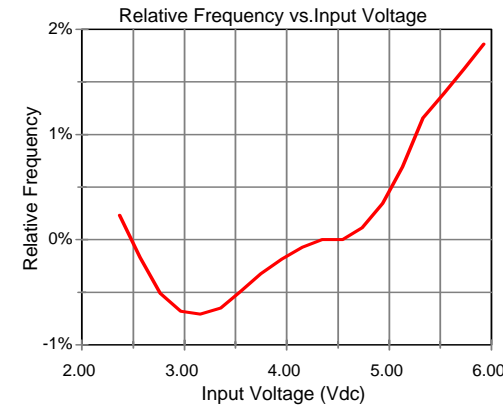
Specifications subject to change without notice.



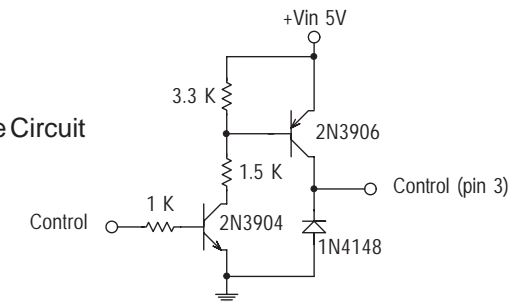
Endicott Research Group, Inc.

## Typical Performance Curves

# L2499



Disable Circuit



Endicott Research Group, Inc.