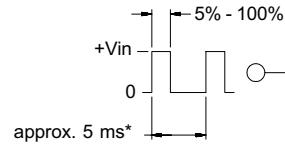
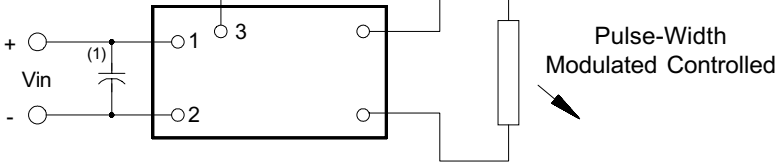


8m052377

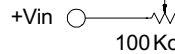
**3 Dimming Options**  
(valid when the "C" jumper is removed)



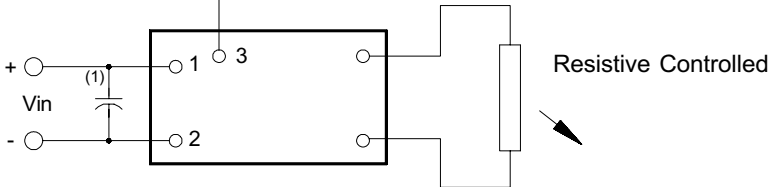
\* should be selected to be compatible with LCD and display driver



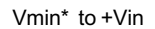
Pulse-Width Modulated Controlled



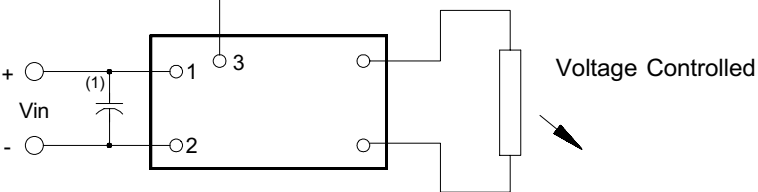
\* value should be low enough to maintain minimum tube current at minimum brightness



Resistive Controlled



\* Vmin should be high enough to maintain minimum tube current



Voltage Controlled

Note 1 Input by-pass capacitor (25 uf - 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>

8m052377

**8m Class  
DC to AC Inverter**

**Specifications and  
Applications Information**

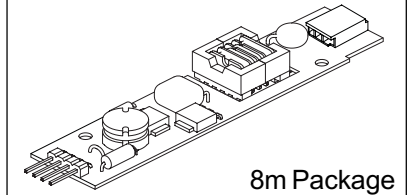
5/3/00

Preliminary

The ERG 8m052377 (8m Class) low profile dc to ac inverter is specifically designed to power the Hitachi SX21V001-Z4A LCD display module to a moderate brightness level from a +5 volt dc source.

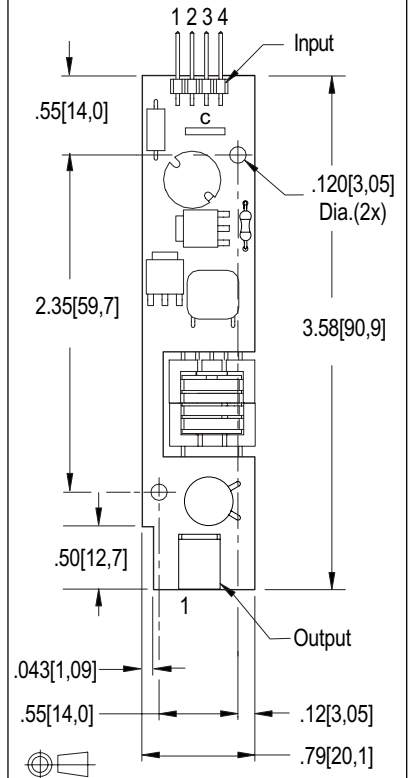
This low profile inverter features:

- ✓ 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 Connector
4 pins are 0.315" [8,00] Long, 0.025" [0,63] Square and are on 0.100" [2,54] Centers.	JST SM02B-BHSS-1-TB
Con1-1 Vin(+) Con1-2 GND Con1-3 Control * Con1-4 NC	Con2-1 ACcommon Con2-2 ACout
* Valid when the "C" jumper is removed.	

# 8m052377

## 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>	-	.28	.33	Adc
Operating Frequency	F <sub>o</sub>	24	28	32	KHz
Minimum Output Voltage	V <sub>out</sub> (min)	1400	-	-	Vrms
Efficiency	η	-	71	-	%
Output Current	I <sub>out</sub>	-	1.9	-	marms
Output Voltage (When powering a load simulating the referenced display.)	V <sub>out</sub>	-	520	-	Vrms
Pin3 Input Current Requirement	-	-	9	-	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.

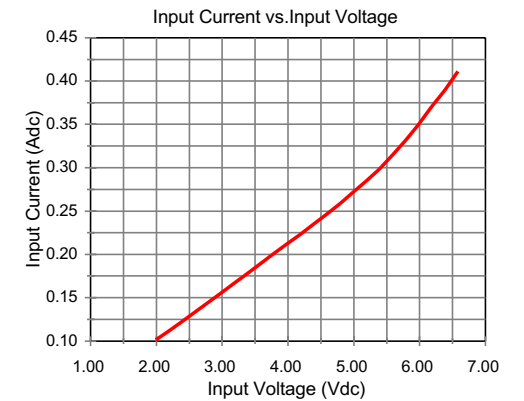
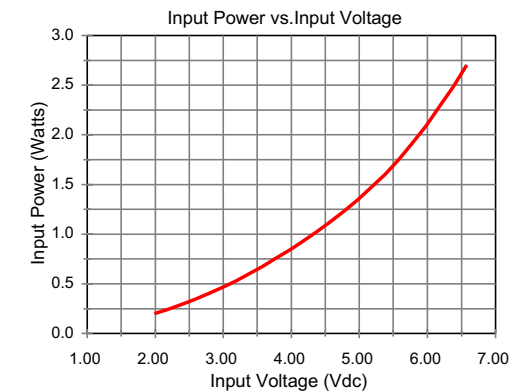
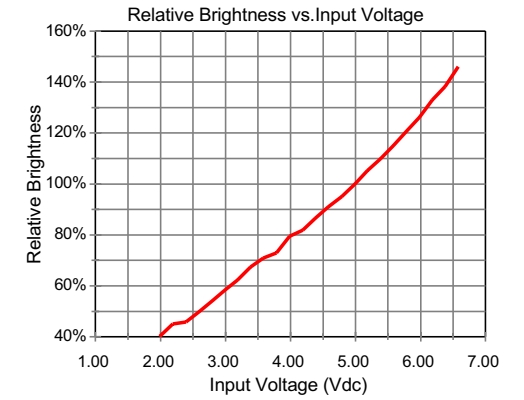
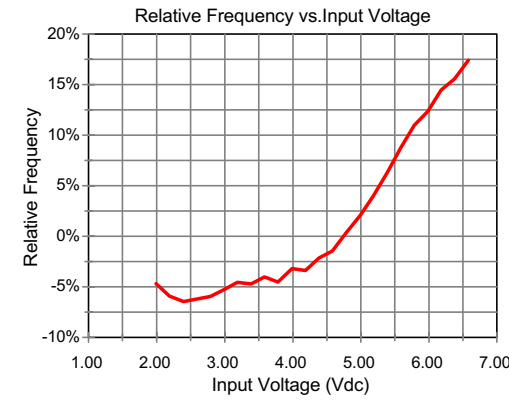


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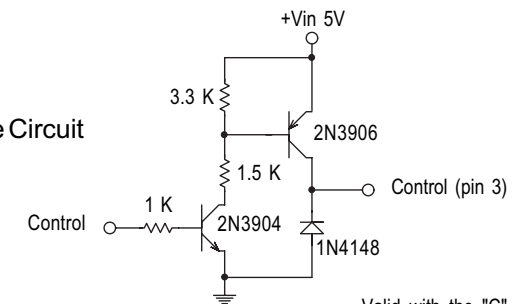
Made in USA

## Typical Performance Curves

# 8m052377



## Disable Circuit



Valid with the "C" jumper removed



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