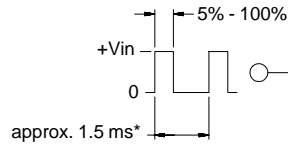
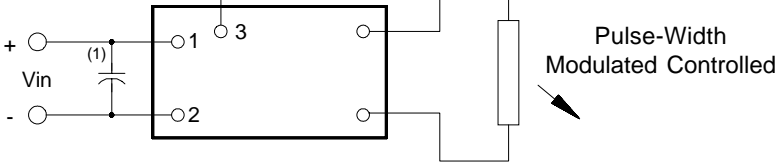


8m122359

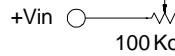
**3 Dimming Options**  
(valid when the "C" jumper is removed)



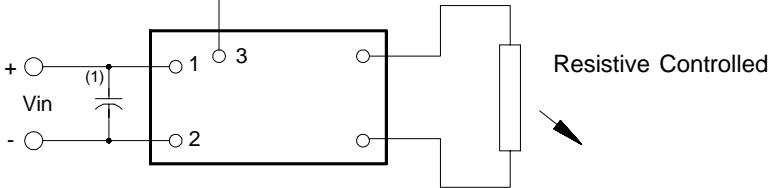
\* should be selected to be compatible with LCD and display driver



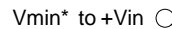
Pulse-Width Modulated Controlled



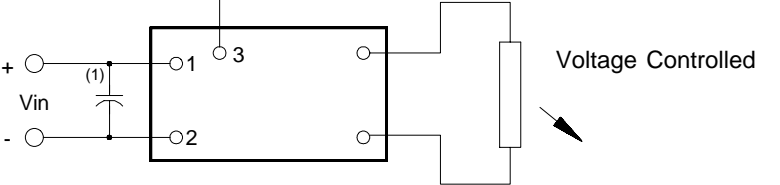
\* value should be low enough to maintain minimum tube current at minimum brightness



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.



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<http://www.ergpower.com>

**Specifications and Applications Information**

4/7/00

Preliminary

The ERG 8m122359 (8m Class) low profile dc to ac inverter is specifically designed to power the Kyocera KCS072VG1MB-G40, KHS072VG1MB-G80/G83 LCD display module to a moderate brightness level from a +12 volt dc source.

This low profile inverter features:

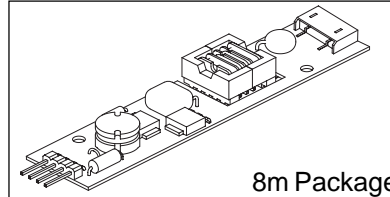
- ✓ Less Than 8 mm in Height
- ✓ LCD Module Specific
- ✓ Display Compatible Output Connector
- ✓ Firm Specifications
- ✓ Application Information
- ✓ Designed, Manufactured and Supported in the USA
- ✓ Custom Input and Output Voltages
- ✓ Flexible System Interface
- ✓ Notebook Display Head Compatible

**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 SM02(8.0)B-BHS-1-TB
Con1-1 Vin(+) Con1-2 GND Con1-3 Control * Con1-4 NC	Con2-1 ACout Con2-2 NC Con2-3 NC Con2-4 ACout
* Valid when the "C" Jumper is removed	

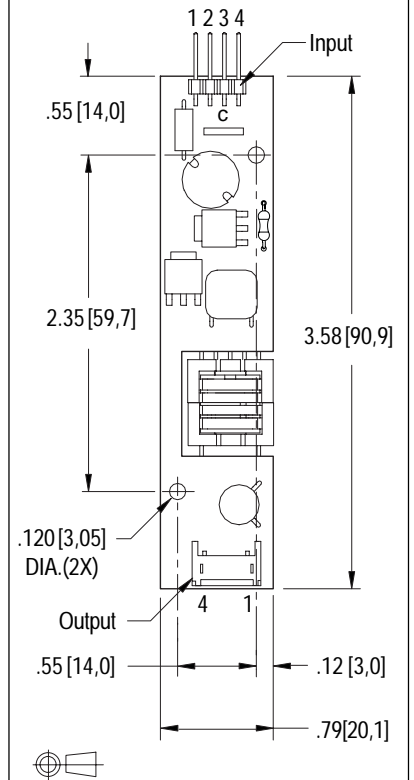
8m122359

8m Class  
DC to AC Inverter



8m Package

**Package Configuration**



# 8m122359

## Absolute Maximum Ratings

Rating	Symbol	Value	Units
Input Voltage Range	V <sub>in</sub>	-0.3 to +13.2	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>	+6 to 13.2	Vdc

## Electrical Characteristics

Unless otherwise noted V<sub>in</sub> = 12.00 Volts dc and T<sub>a</sub> = 25 °C

Characteristic	Symbol	Min	Typ	Max	Units
Input Current	I <sub>in</sub>	-	.23	.26	Adc
Operating Frequency	F <sub>o</sub>	31	36	41	KHz
Minimum Output Voltage	V <sub>out</sub> (min)	1000	-	-	Vrms
Efficiency	η	-	73	-	%
Output Current	I <sub>out</sub>	-	5.2	-	marms
Output Voltage (When powering a load simulating the referenced display)	V <sub>out</sub>	-	385	-	Vrms
Pin3 Input Current Requirement	-	-	6	-	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.



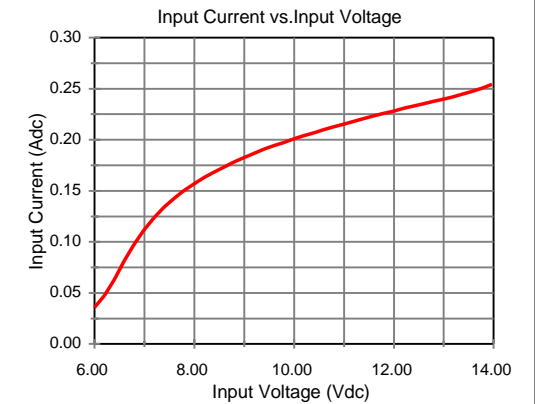
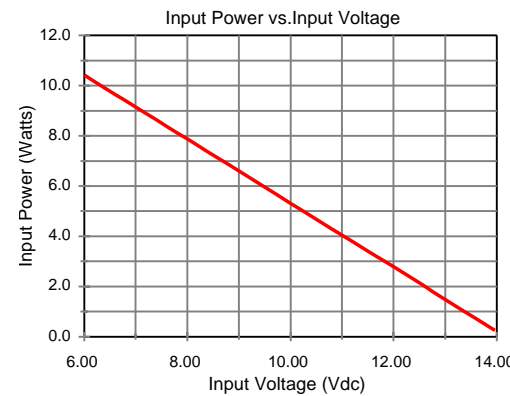
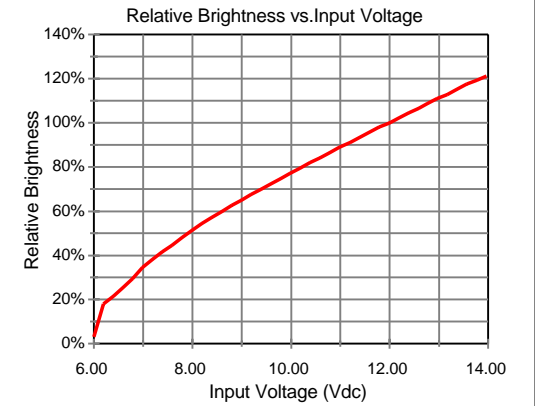
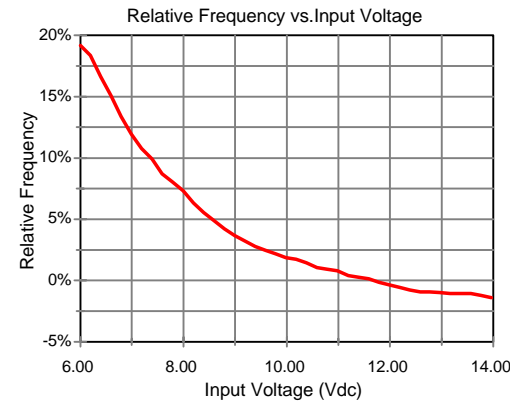
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Made in USA

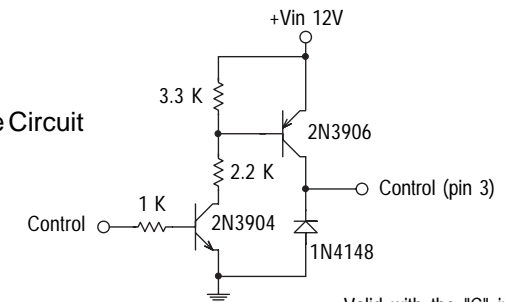
page 2.

## Typical Performance Curves

# 8m122359



### Disable Circuit



Valid with the "C" jumper removed



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page 3.