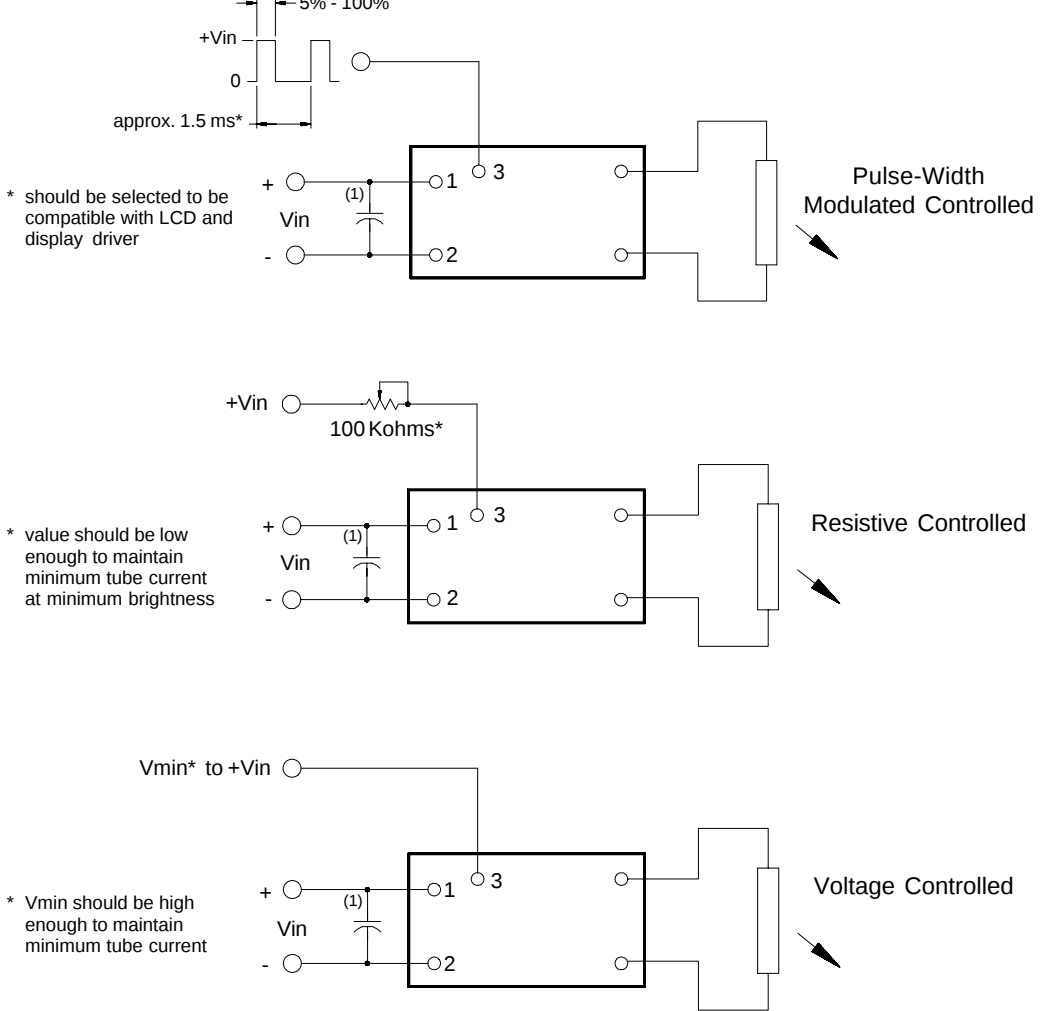


8m051994

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



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

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

* Vmin should be high enough to maintain minimum tube current

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>

Specifications and
Applications Information

4/14/00

Preliminary

The ERG 8m051994 (*8m Class*) low profile dc to ac inverter is specifically designed to power the Sharp LM10V33 LCD display module to a moderate brightness level from a +5 volt dc source.

This low profile inverter features:

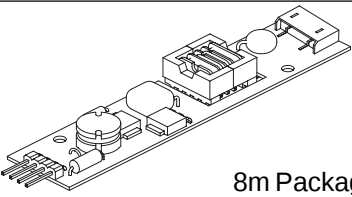
- ✓ Less Than 8 mm in Height
- ✓ LCD Module Specific
- ✓ Display Compatible Output Connector
- ✓ Firm Specifications
- ✓ Application Information
- ✓ Designed, Manufactured and Supported in the USA
- ✓ Custom Input and Output Voltages
- ✓ Flexible System Interface
- ✓ Notebook Display Head Compatible

Pin Descriptions

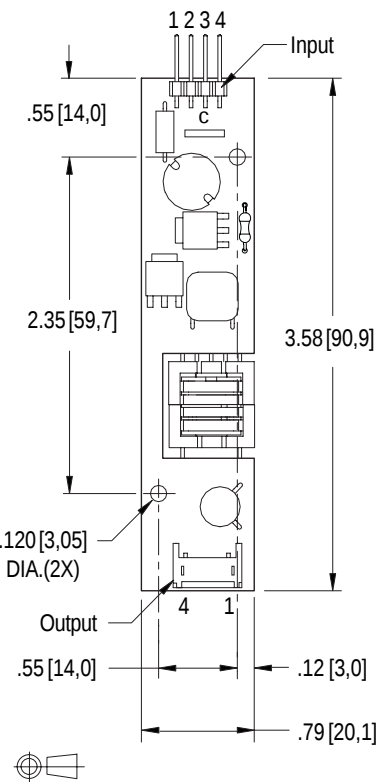
Input Connector	Output Connector
4 pins are 0.315" [8,00] Long, 0.025" [0,63] Square and are on 0.100" [2,54] Centers.	JST SM02(8.0)B-BHS-1-TB
Con1-1 Vin(+) Con1-2 GND Con1-3 Control * Con1-4 NC	Con2-1 ACout Con2-2 NC Con2-3 NC Con2-4 ACout
* Valid when the "C" Jumper is removed	

8m051994

8m Class
DC to AC Inverter



Package Configuration



Absolute Maximum Ratings

Rating	Symbol	Value	Units
Input Voltage Range	Vin	-0.3 to +6.0	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	+3 to 5.5	Vdc

Electrical Characteristics

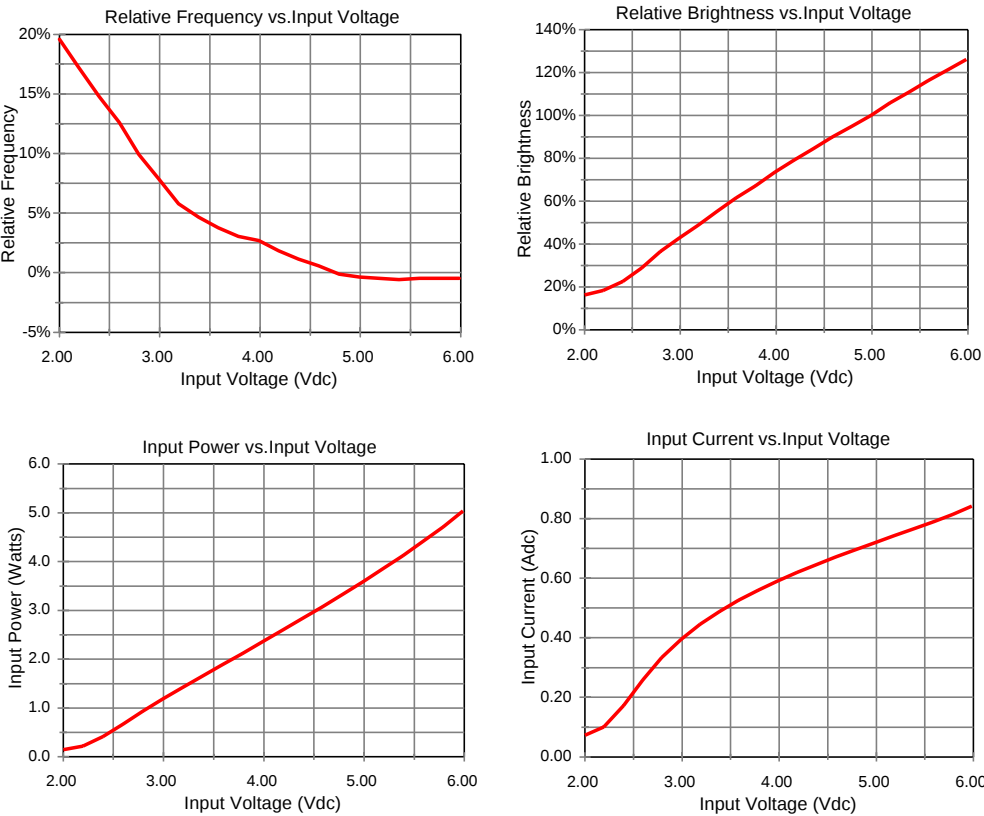
Unless otherwise noted Vin = 5.00 Volts dc and Ta = 25 °C

Characteristic	Symbol	Min	Typ	Max	Units
Input Current	Iin	-	.73	.82	Adc
Operating Frequency	Fo	40	45	50	KHz
Minimum Output Voltage	Vout (min)	1300	-	-	Vrms
Efficiency	η	-	77	-	%
Output Current	Iout	-	5.5	-	marms
Output Voltage (When powering a Sharp LM10V33 display.)	Vout	-	510	-	Vrms
Pin3 Input Current Requirement	-	-	19	-	madc

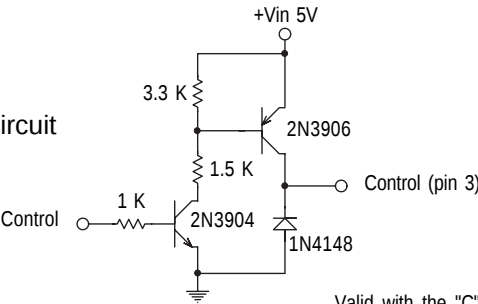
After tube has been allowed to warm-up for 5 minutes
External Disable Circuit shown on page 3.

Specifications subject to change without notice.

Typical Performance Curves



Disable Circuit



Valid with the "C" jumper removed