

8m122503

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

Pulse-Width Modulated Controlled

The diagram shows a pulse-width modulated (PWM) signal source connected to pin 3. The signal is a square wave with a duty cycle of 5% to 100% and a period of approximately 1.5 ms. The input voltage is +Vin. A by-pass capacitor (1) is connected between pins 1 and 2, with Vin applied to pin 1. The tube is connected to a load resistor.

Resistive Controlled

The diagram shows a resistive control circuit. A 100 Kohms resistor is connected between pin 3 and +Vin. A by-pass capacitor (1) is connected between pins 1 and 2, with Vin applied to pin 1. The tube is connected to a load resistor.

Voltage Controlled

The diagram shows a voltage control circuit. A voltage source Vmin* to +Vin is connected to pin 3. A by-pass capacitor (1) is connected between pins 1 and 2, with Vin applied to pin 1. The tube is connected to a load resistor.

*** 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.

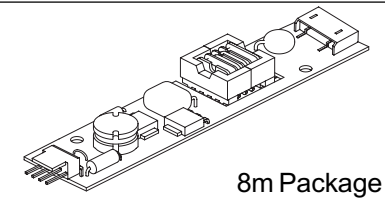
2601 Wayne St., Endicott NY 13760

607-754-9187

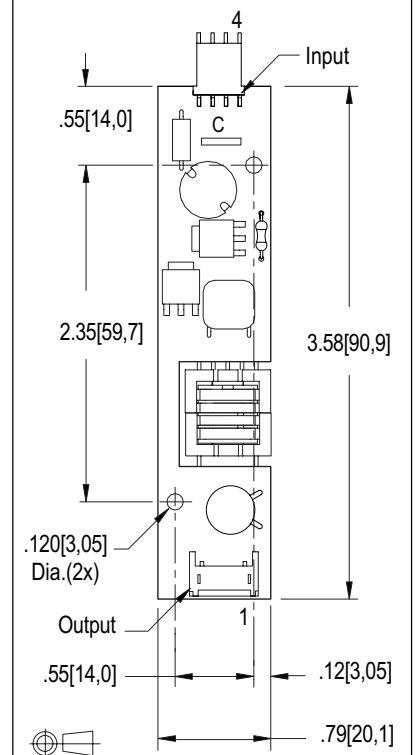


8m Class

DC to AC Inverter



Package Configuration



Specifications and Applications Information

Preliminary

This low profile inverter features:

- ✓ Less Than 8 mm in Height
- ✓ LCD Module Specific
- ✓ Display Compatible Output Connector
- ✓ Firm Specifications
- ✓ Application Information
- ✓ Made in U.S.A.
- ✓ Factory Support
- ✓ Custom Input and Output Voltages
- ✓ Flexible System Interface
- ✓ Notebook Display Head Compatible

Pin Descriptions

<u>Input Connector</u>	<u>Output Connector</u>
Molex 22-05-3041	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	

8m122503

Absolute Maximum Ratings

Rating	Symbol	Value	Units
Input Voltage Range	Vin	-0.3 to +13.2	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	+6 to 13.2	Vdc

Electrical Characteristics

Unless otherwise noted Vin = 12.00 Volts dc and Ta = 25 °C

Characteristic	Symbol	Min	Typ	Max	Units
Input Current	Iin	-	.45	.51	Adc
Operating Frequency	Fo	34	39	44	KHz
Minimum Output Voltage	Vout (min)	1500	-	-	Vrms
Efficiency	η	-	76	-	%
Output Current	Iout	-	6.0	-	marms
Output Voltage (When powering a Sharp LQ084V1DG21 display)	Vout	-	680	-	Vrms
Pin3 Input Current Requirement	-	-	15	-	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.

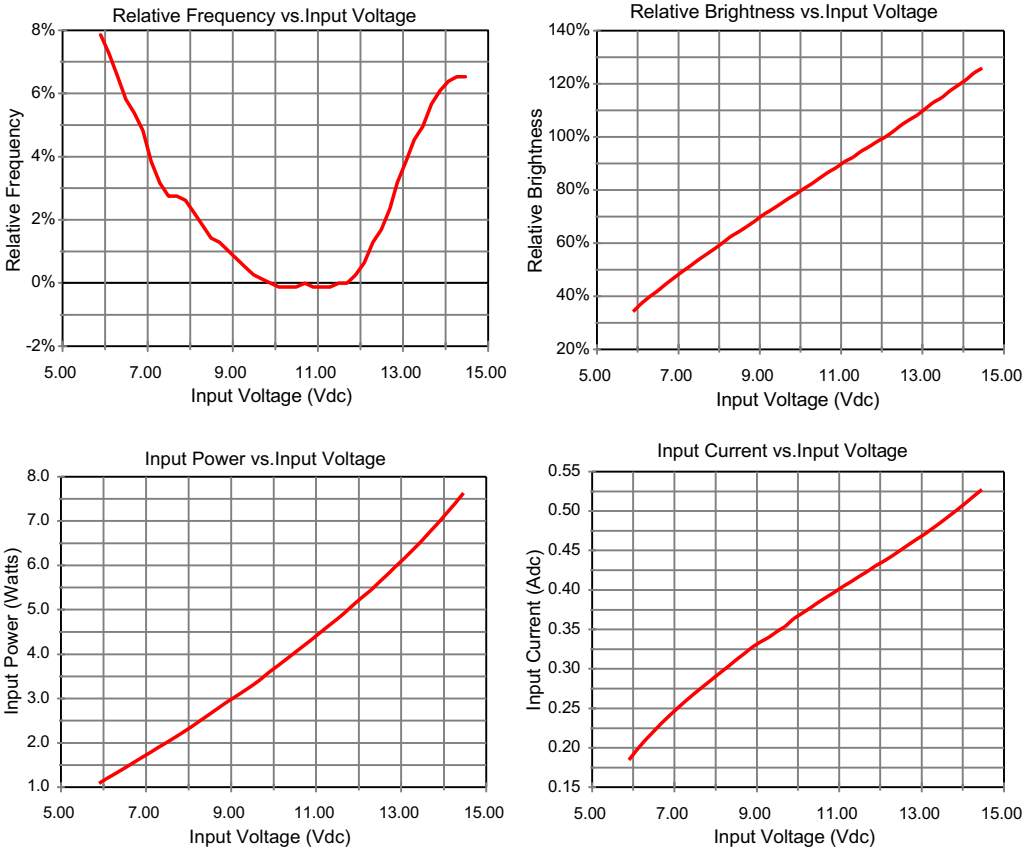


Endicott Research Group, Inc.

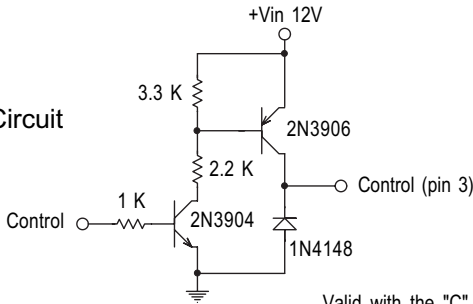
Made in USA

Typical Performance Curves

8m122503



Disable Circuit



Valid with the "C" jumper removed



Endicott Research Group, Inc.