

8m052345

3 Dimming Options

+Vin

0

5% - 100%

approx. 1.5 ms*

+

Vin

-

(1)

1

3

2

Pulse-Width

Modulated Controlled

+

Vin

-

(1)

1

3

2

Resistive Controlled

+

Vin

-

(1)

1

3

2

Voltage Controlled

* 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.

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8m052345

8m Class DC to AC Inverter

8m Package

Specifications and Applications Information

1/21/00 Preliminary

The ERG 8m052345 (8m Class) low profile dc to ac inverter is specifically designed to power the Sharp LQ10D367 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

Package Configuration

1 2 3 4

Input

.55 [14,0]

2.35 [59,7]

3.58 [90,9]

.120 [3,05] DIA. (2X)

Output

.55 [14,0]

.12 [3,0]

.79 [20,1]

page 4.

Absolute Maximum Ratings

Rating	Symbol	Value	Units
Input Voltage Range	Vin	-0.3 to +5.5	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	+2.5 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	-	.78	.88	Adc
Operating Frequency	Fo	38	43	48	KHz
Minimum Output Voltage	Vout (min)	1400	-	-	Vrms
Efficiency	η	-	77	-	%
Output Current	Iout	-	6.0	-	marms
Output Voltage (When powering a load simulating the referenced display)	Vout	-	500	-	Vrms
Pin3 Input Current Requirement	-	-	22	-	madc

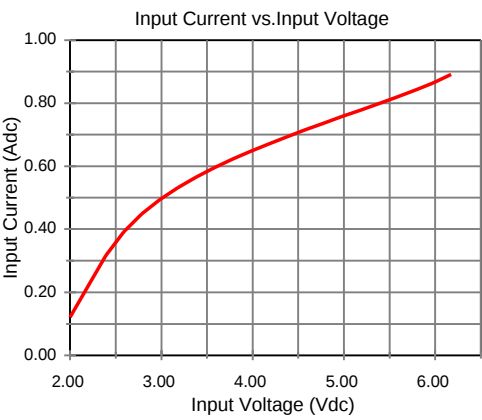
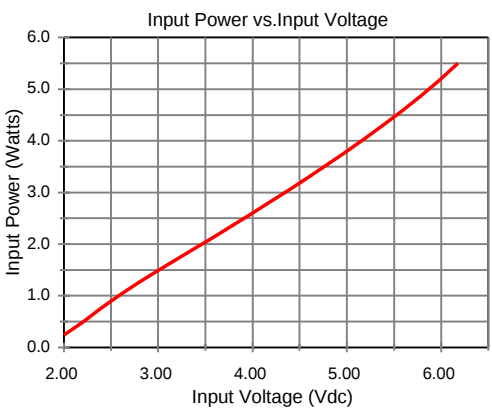
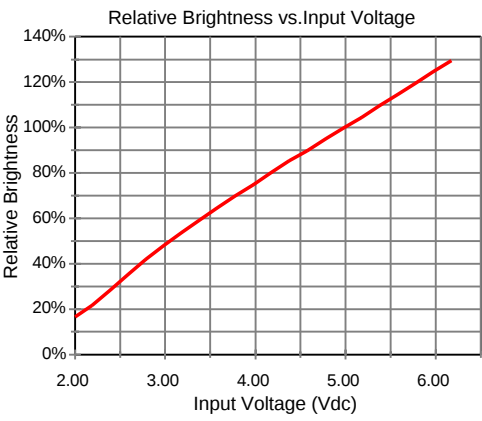
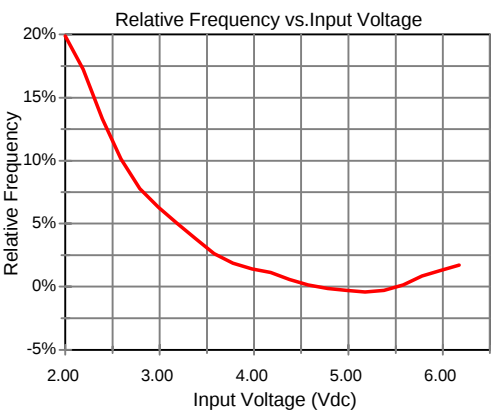
After tube has been allowed to warm-up for 5 minutes
External Disable Circuit shown on page 3.



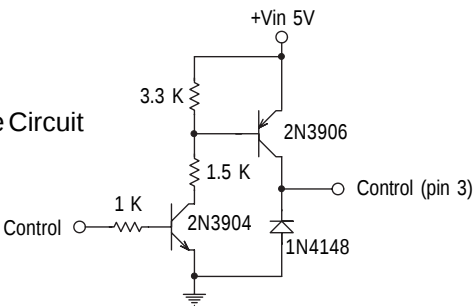
Endicott Research Group, Inc.

Made in USA

Typical Performance Curves



Disable Circuit



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