



Endicott Research Group, Inc.

2601 Wayne St., Endicott NY 13760

607-754-9187 Fax 607-754-9255

8m054P83

Specifications and Applications Information

12/28/92

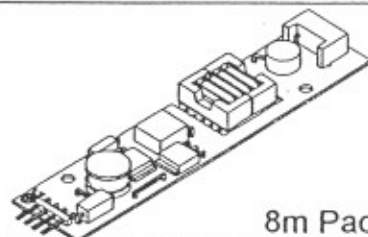
Preliminary

8m Class
DC to AC Inverter

The ERG 8m054P83 (*8m Class*) low profile dc to ac inverter is specifically designed to power the Sharp LM64P831 VGA LCD display module to a moderate brightness level from a +5 volt dc source.

This low profile inverter features:

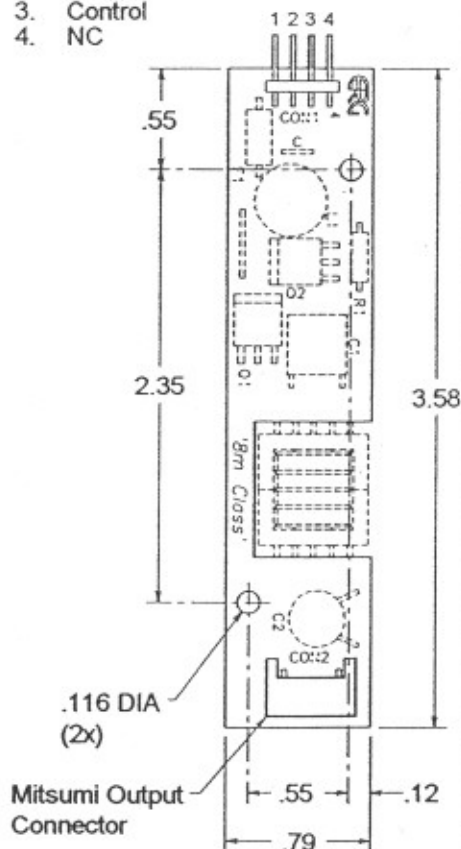
- ✓ Less Than 8 mm in Height
- ✓ LCD Module Specific
- ✓ Display Compatible Output Connector
- ✓ High Efficiency (80% - 85%)
- ✓ Firm Specifications
- ✓ Application Information
- ✓ Made in U.S.A.
- ✓ Factory Support
- ✓ Custom Input and Output Voltages
- ✓ Flexible System Interface
- ✓ Notebook Display Head Compatible



8m Package

Package Configuration

1. Vin(+)
2. Vin(-)
3. Control
4. NC



For a printed circuit board mountable solution, the following E200II inverters are also available for the Sharp LM64P831:

E1373 5 volt input

E1374 12 volt input

ABSOLUTE MAXIMUM RATINGS

Rating	Symbol	Value	Units
Input Voltage Range	V _{in}	-0.3 to 6.0	Vdc
Operating Temperature	T _O	0 to 70	°C
Storage Temperature	T _{stg}	-40 to +85	°C

RECOMMENDED OPERATING CONDITIONS

Rating	Symbol	Value	Units
Input Voltage	V _{in}	3.0 to 5.5	Vdc

ELECTRICAL CHARACTERISTICS

Unless otherwise noted V_{in} = 5.00 Volts dc and T_a = 25°C

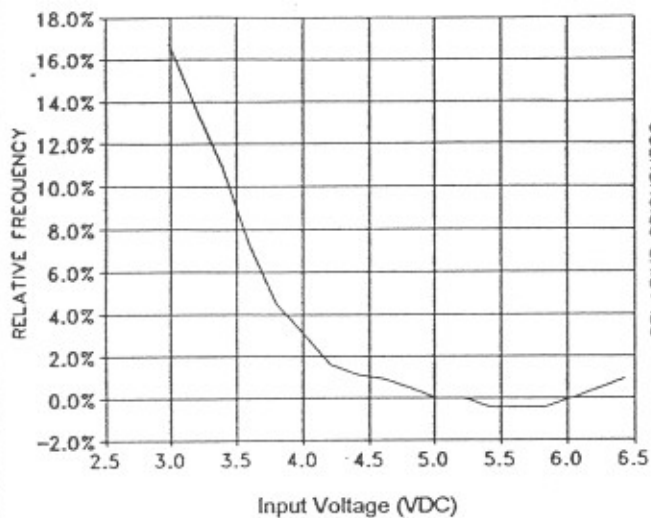
Characteristic	Symbol	Min	Typ	Max	Units
Input Current (V _{in} = 5.00 Volts dc)	I _{in}	-	0.51	0.60	Adc
Operating Frequency (V _{in} = 5.00 Volts dc)	F _o	25.0	33.0	40.0	Khz
Minimum Output Voltage (V _{in} = 5.00 Volts T _a = 25 °C)	V _{out(min)}	1100	-	-	Vrms
Efficiency	eff	-	82	-	%
Output Current	I _{out}	-	5.0	-	marms
Output Voltage (When powering a Sharp LM64P831 display)	V _{out}	-	390	-	Vrms

After tubes has been allowed to warm-up for 5 minutes.

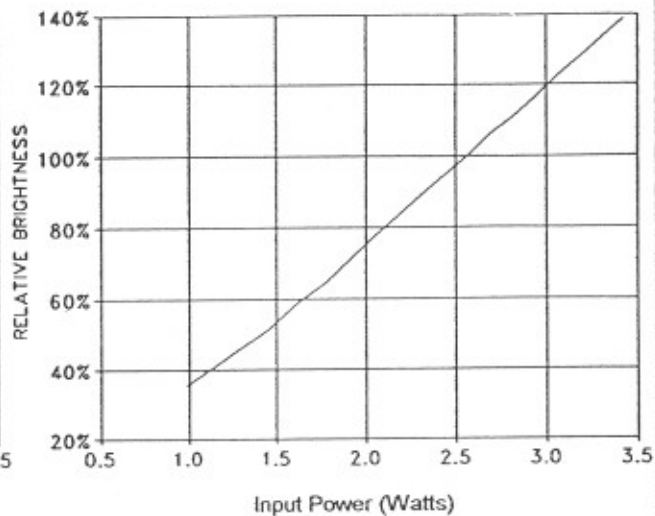
Specifications subject to change without notice.

Typical Performance Curves

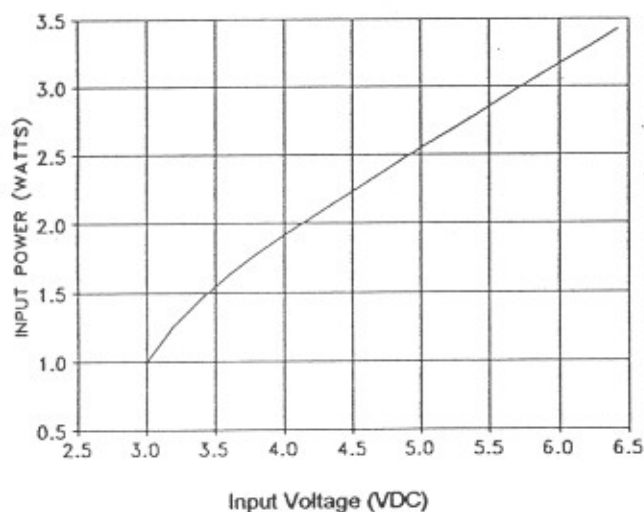
Relative Frequency vs. Input Voltage



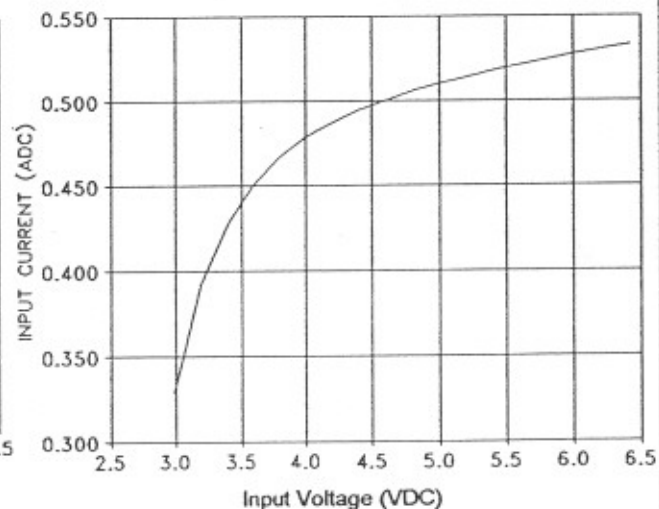
Relative Brightness vs. Input Power



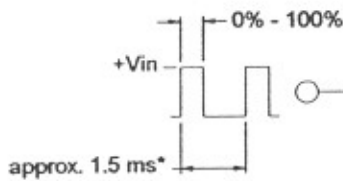
Input Power vs. Input Voltage



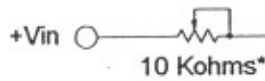
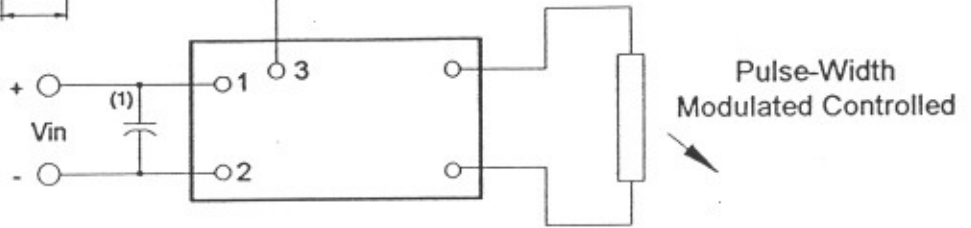
Input Current vs. Input Voltage



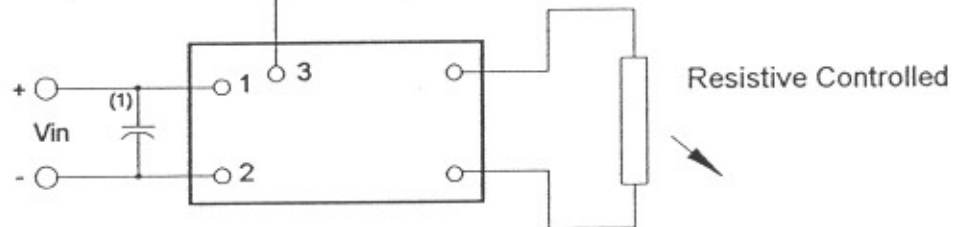
3 Dimming Options (valid when the "C" jumper is removed)



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

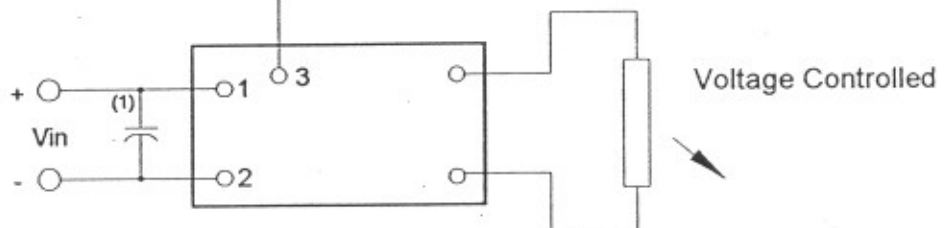


* value should low enough to maintain minimum tube current at minimum brightness



Vmin* to +Vin

* 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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