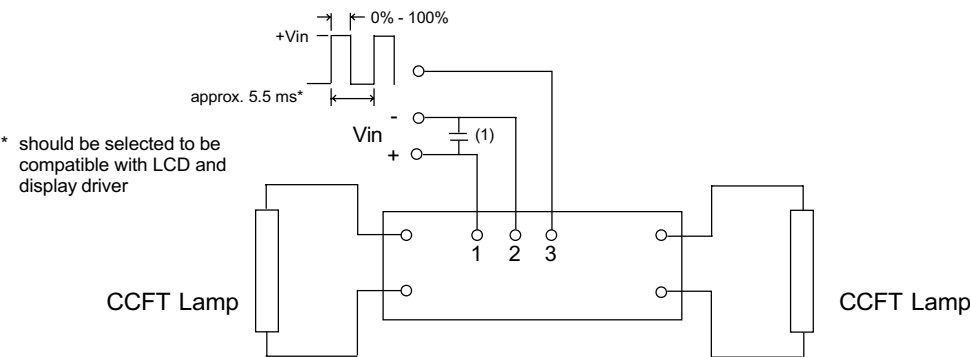


K1985

Dimming Option
(valid when the "C" jumper is removed)



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

Pulse-Width Modulation Controlled

* Note 1 - Input by-pass capacitor (25uf - 100uf) may be required to reduce reflected ripple.



Endicott Research Group, Inc.
2601 Wayne St., Endicott NY 13760
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2601 Wayne St., Endicott NY 13760
607-754-9187 Fax 607-754-9255
<http://www.ergpower.com>

Specifications and
Applications Information

11/08/99

Preliminary

The ERG K1985 (*8m Class*) low profile dc to ac inverter is specifically designed to power the Sharp LQ12S31 LCD display module to a moderate brightness level from a +5 volt dc source.

This low profile inverter features:

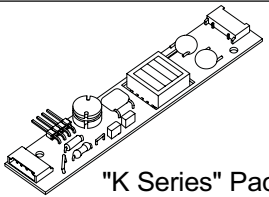
- ✓ Less Than 8 mm in Height
- ✓ LCD Module Specific
- ✓ Display Compatible Output Connector
- ✓ Firm Specifications
- ✓ Application Information
- ✓ Designed, Manufactured and Supported in the USA
- ✓ Custom Input and Output Voltages
- ✓ Flexible System Interface
- ✓ Notebook Display Head Compatible

Pin Descriptions

Input Connector	Output Connectors	
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-BHS1TB	
J1-1 Vin(+)	J2-1 ACout	J3-1 ACout
J1-2 GND	J2-2 NC	J3-2 NC
J1-3 Control *	J2-3 NC	J3-3 NC
J1-4 NC	J2-4 ACout	J3-4 ACout
* Valid when the "C" Jumper is removed		

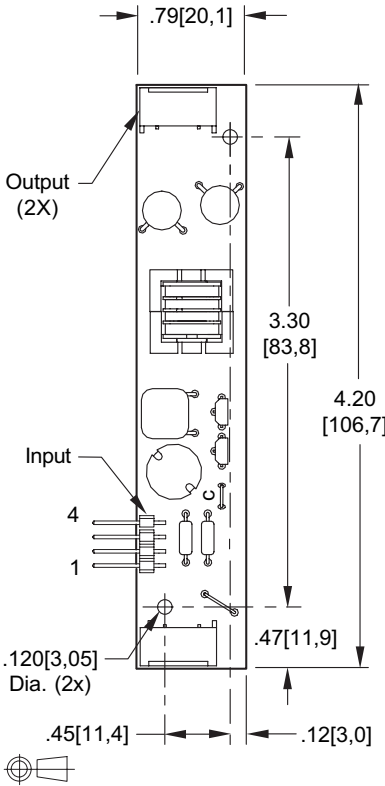
K1985

8m Class
2 Tube DC to AC Inverter



"K Series" Package

Package Configuration



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}	+3.5 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	I_{in}	-	1.70	1.87	Adc
Operating Frequency	F_o	54	59	64	KHz
Minimum Output Voltage	V_{out}	1200	-	-	V_{rms}
Efficiency	η	-	71	-	%
Output Current (per tube)	I_{out}	-	5.5	-	marms
Output Voltage (per tube in the Sharp LQ12S31 display)	V_{out}	-	550	-	V_{rms}

After tube has been allowed to warm-up for 5 minutes

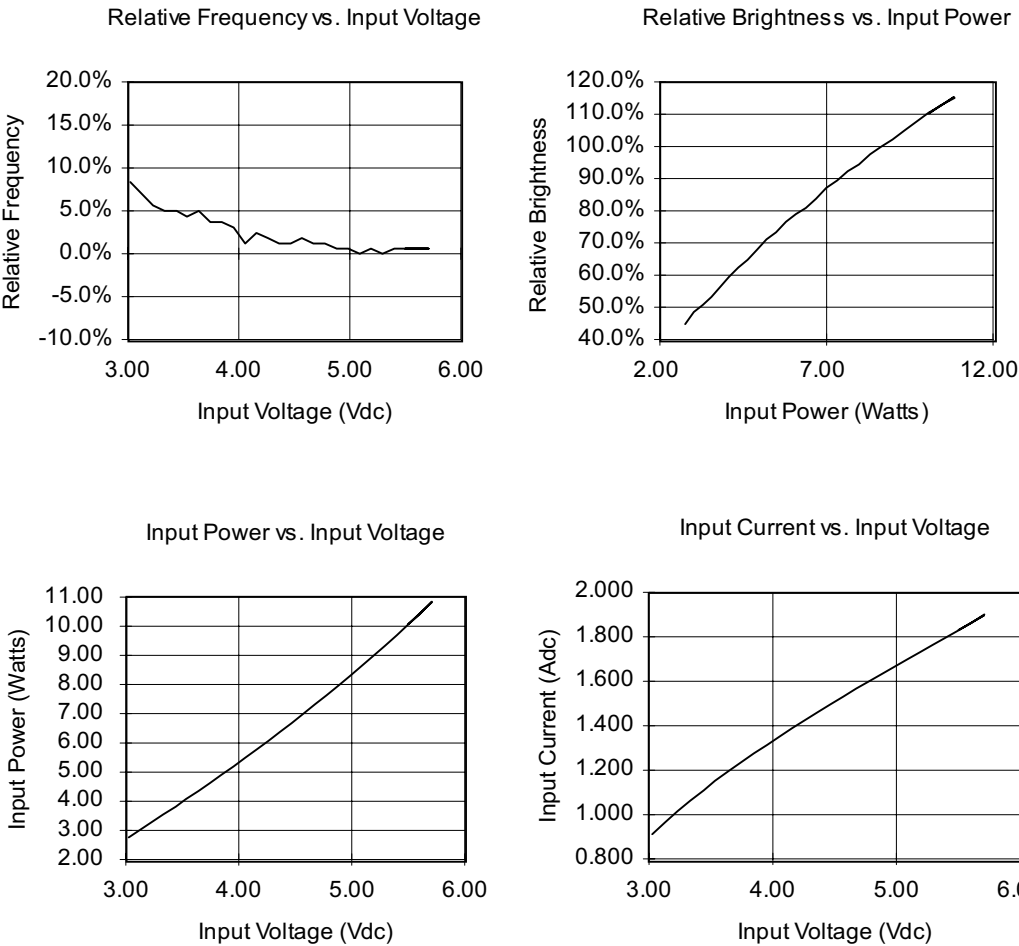
Specifications subject to change without notice



Endicott Research Group, Inc.

Made in USA

Typical Performance Curves



Endicott Research Group, Inc.