

8M122247

3 Dimming Options

(valid when the "C" jumper is removed)

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

Pulse-Width Modulated Controlled

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

Resistive Controlled

* Vmin should be high enough to maintain minimum tube current

Voltage Controlled

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

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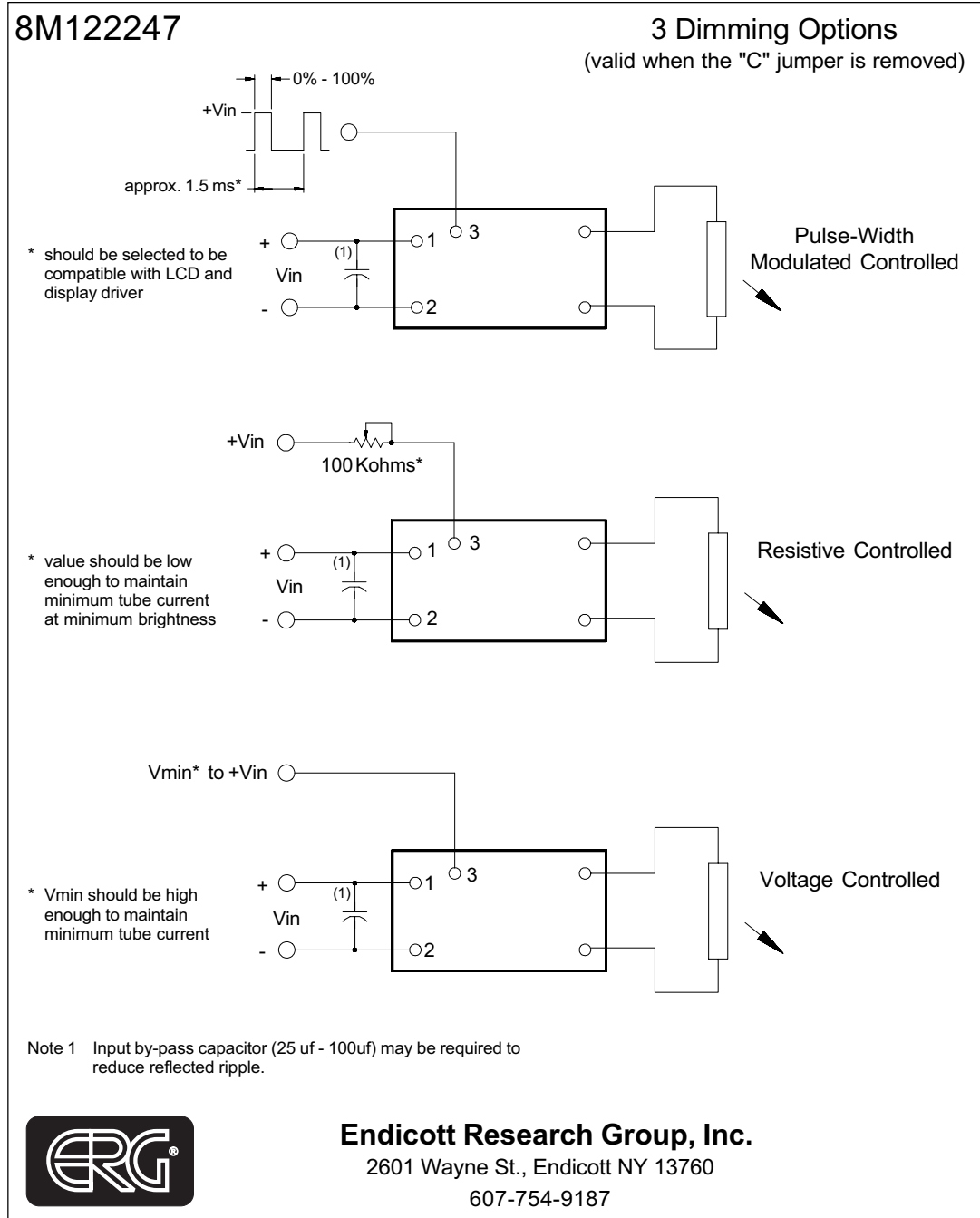
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Specifications and Applications Information

11/11/99 Preliminary

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The ERG 8M122247 (*8m Class*) low profile dc to ac inverter is specifically designed to power the Hitachi SX19V001-Z4A LCD display module to a moderate brightness level from a +12 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

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Pin Descriptions	
<u>Input Connector</u>	<u>Output Connector</u>
4 pins are 0.315" [8,00] Long, 0.025" [0,63] Square and are on 0.100" [2,54] Centers.	Mitsumi M60-04-30-134P
Con1-1 Vin(+) Con1-2 GND Con1-3 Control * Con1-4 NC	Con2-1 ACout Con2-2 NC Con2-3 NC Con2-4 ACout
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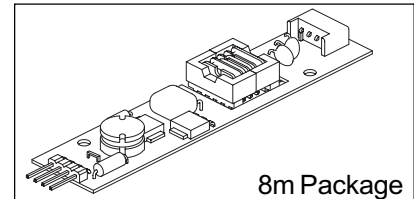
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8m Class DC to AC Inverter



Package Configuration

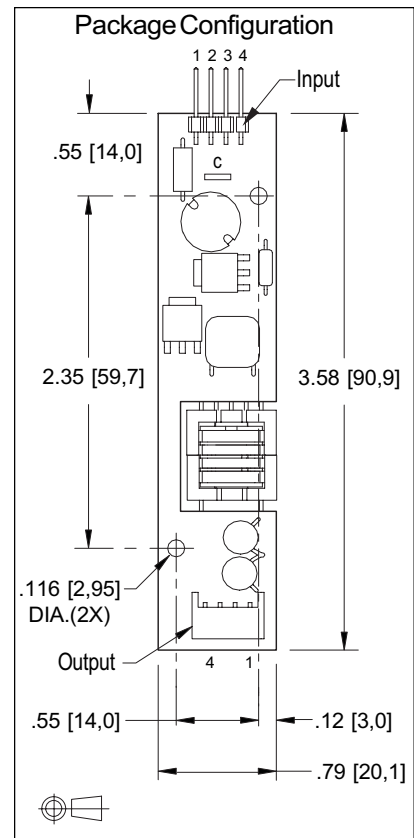
Top view of the package configuration showing dimensions and pin locations. The package is rectangular with a central horizontal slot. Dimensions are given in inches and millimeters (in [mm]).

- Pin 1: Located at the bottom right, labeled "1".
- Pin 2: Located at the top right, labeled "2".
- Pin 3: Located at the top right, labeled "3".
- Pin 4: Located at the top right, labeled "4".
- Input: Located at the top right, labeled "Input".
- Output: Located at the bottom left, labeled "Output".
- Pin 4: Located at the bottom left, labeled "4".
- Pin 1: Located at the bottom left, labeled "1".

Dimensions:

- Overall width: .79 [20,1]
- Overall height: 3.58 [90,9]
- Distance from top edge to pin 1: 2.35 [59,7]
- Distance from bottom edge to pin 1: .116 [2,95] DIA.(2X)
- Distance from left edge to pin 1: .55 [14,0]
- Distance from right edge to pin 1: .12 [3,0]
- Distance from top edge to pin 2: .55 [14,0]
- Distance from bottom edge to pin 2: .55 [14,0]

Internal features include a central slot, a circular feature, and a rectangular feature.



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Absolute Maximum Ratings

Rating	Symbol	Value	Units
Input Voltage Range	V_{in}	-0.3 to +13.2	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}	+6 to 13.2	Vdc

Electrical Characteristics

Unless otherwise noted V_{in} = 12.00 Volts dc and T_a = 25 °C

Characteristic	Symbol	Min	Typ	Max	Units
Input Current	I_{in}	-	.125	.145	Adc
Operating Frequency	F_o	24	28	32	KHz
Minimum Output Voltage	$V_{out} (min)$	1400	-	-	V_{rms}
Efficiency	η	-	70	-	%
Output Current	I_{out}	-	1.9	-	marms
Output Voltage (See below)	V_{out}	-	535	-	V_{rms}

Specifications obtained using a 277 KΩ resistor.
This load is approximately equivalent to the referred display.

Specifications subject to change without notice.

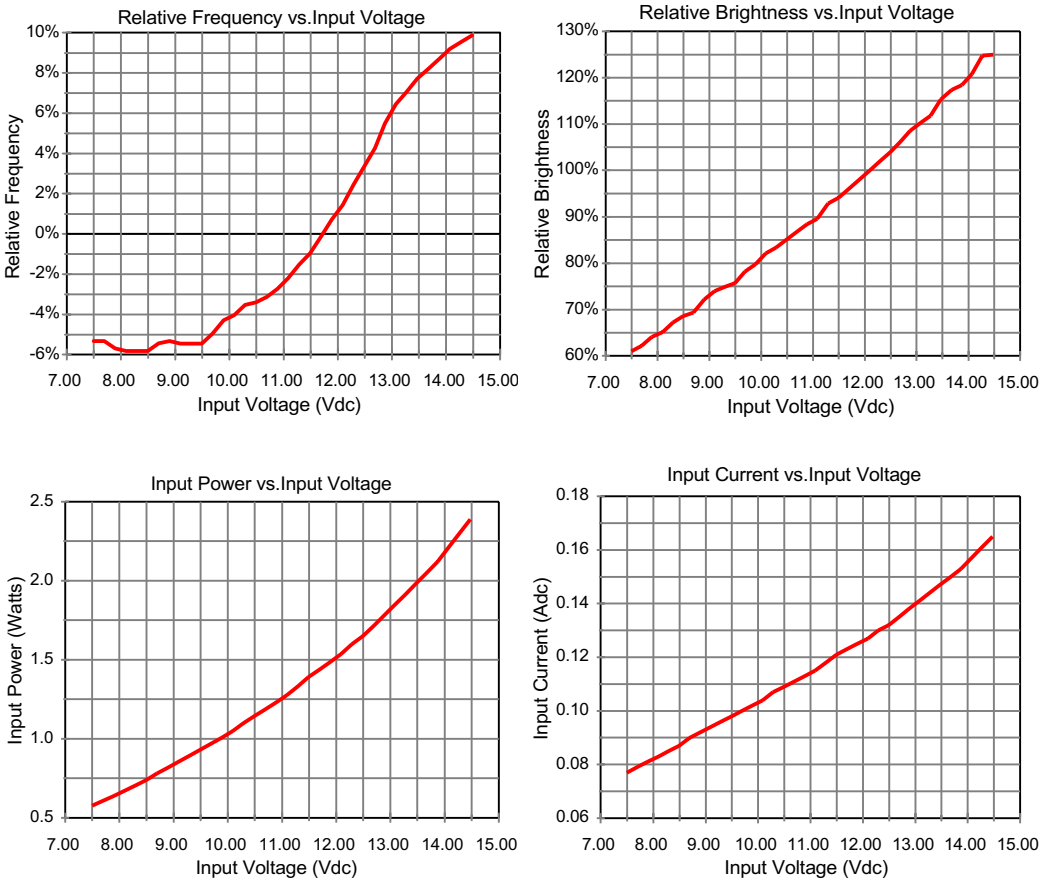


Endicott Research Group, Inc.

Made in USA

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Typical Performance Curves



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