

8m122351

3 Dimming Options

+Vin

0

5% - 100%

approx. 5 ms*

+

Vin

-

(1)

1

3

2

Pulse-Width

Modulated Controlled

+Vin

100 Kohms*

+

Vin

-

(1)

1

3

2

Resistive Controlled

Vmin* to +Vin

+

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.

ERG

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8m Class

DC to AC Inverter

Specifications and Applications Information

3/29/01 Preliminary

The ERG 8m122351 (8m Class) low profile dc to ac inverter is specifically designed to power the Hitachi TX31D27VC1CAB 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

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 ACcommon Con2-2 NC Con2-3 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]

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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	-	.26	.32	Adc
Operating Frequency	Fo	31	36	41	KHz
Minimum Output Voltage	Vout (min)	1400	-	-	Vrms
Efficiency	η	-	76	-	%
Output Current	Iout	-	4	-	marms
Output Voltage (When powering a load simulating the referenced display.)	Vout	-	595	-	Vrms
Pin3 Input Current Requirement	-	-	7	-	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.

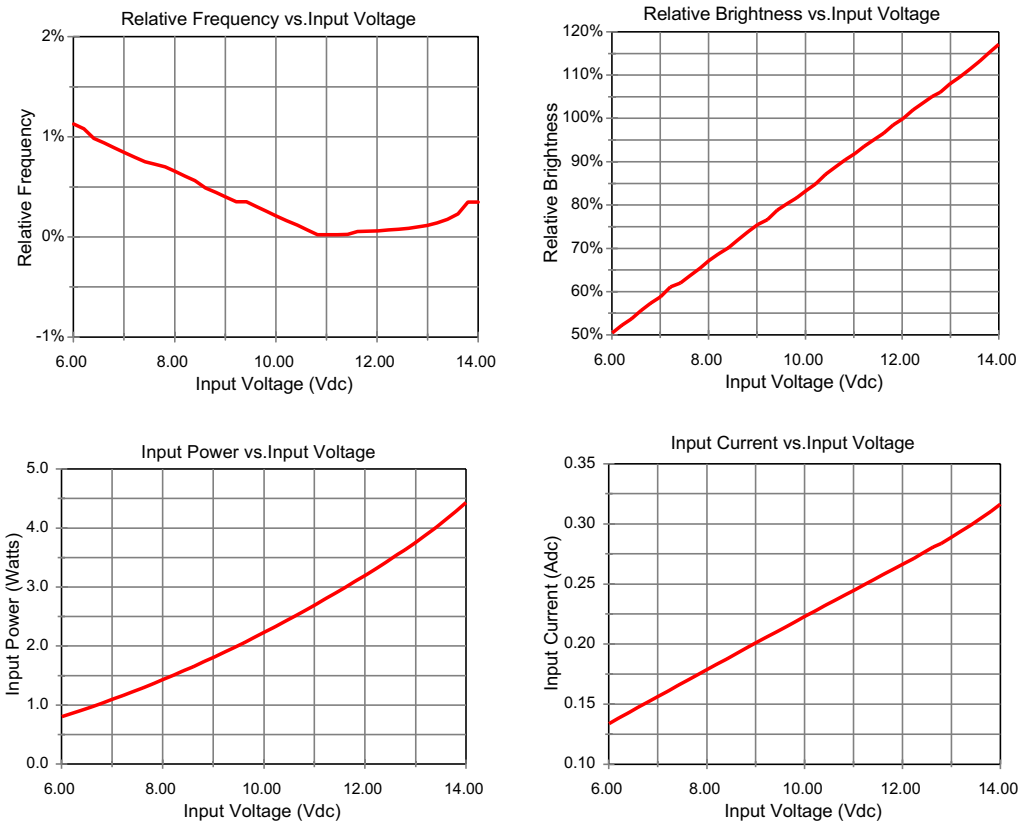


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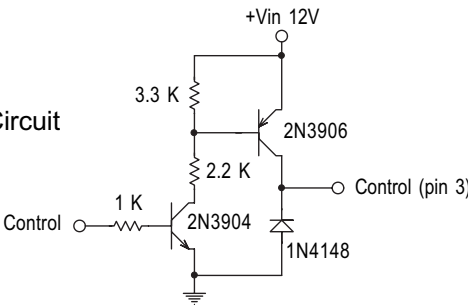
Made in USA

Typical Performance Curves

8m122351



Disable Circuit



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