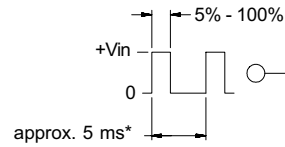
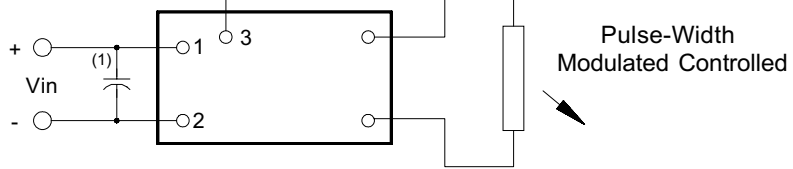


8m052489

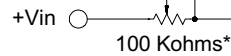
**3 Dimming Options**  
(valid when the "C" jumper is removed)



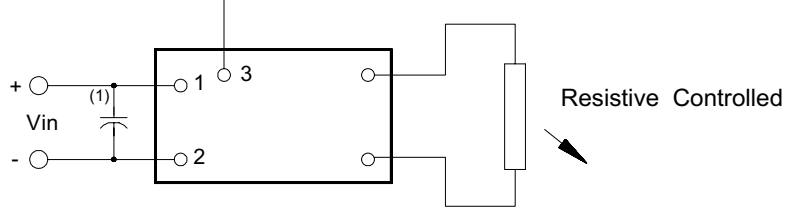
\* should be selected to be compatible with LCD and display driver



Pulse-Width Modulated Controlled



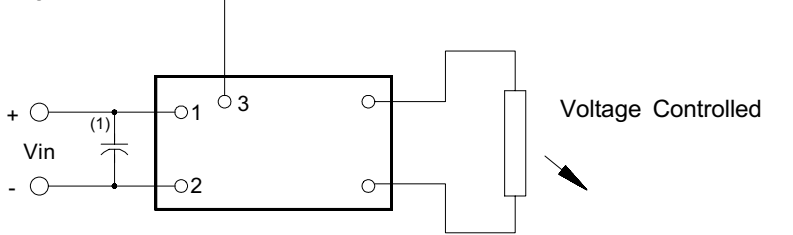
\* value should be low enough to maintain minimum tube current at minimum brightness



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.



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**Specifications and Applications Information**

12/14/00

Preliminary

The ERG 8m052489 (*8m Class*) low profile dc to ac inverter is specifically designed to power the Samsung LTN104S2-L01 LCD display module to a moderate brightness level from a +5 volt dc source.

This low profile inverter features:

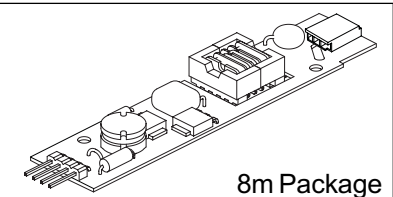
- ✓ Less Than 8 mm in Height
- ✓ LCD Module Specific
- ✓ Display Compatible Output Connector
- ✓ Firm Specifications
- ✓ Application Information
- ✓ Designed, Manufactured and Supported in the USA
- ✓ Custom Input and Output Voltages
- ✓ Flexible System Interface
- ✓ Notebook Display Head Compatible

**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 SM02B-BHSS-1-TB
Con1-1 Vin(+) Con1-2 GND Con1-3 Control * Con1-4 NC	Con2-1 ACout Con2-2 ACout
* Valid when the "C" Jumper is removed	

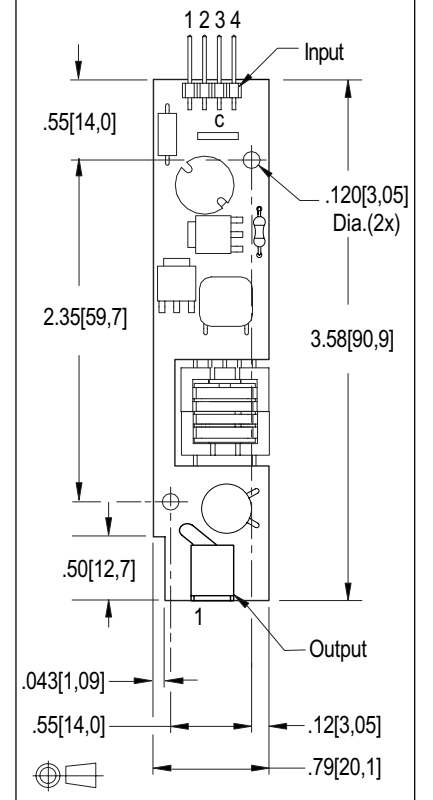
8m052489

*8m Class*  
DC to AC Inverter



8m Package

**Package Configuration**



**Absolute Maximum Ratings**

Rating	Symbol	Value	Units
Input Voltage Range	V <sub>in</sub>	-0.3 to +6	Vdc
Operating Temperature	T <sub>o</sub>	-0 to +70	°C
Storage Temperature	T <sub>stg</sub>	-40 to +85	°C

**Recommended Operating Conditions**

Rating	Symbol	Value	Units
Input Voltage	V <sub>in</sub>	+3 to 5.5	Vdc

**Electrical Characteristics**

Unless otherwise noted V<sub>in</sub> = 5.00 Volts dc and T<sub>a</sub> = 25 °C

Characteristic	Symbol	Min	Typ	Max	Units
Input Current	I <sub>in</sub>	-	.83	.92	Adc
Operating Frequency	F <sub>o</sub>	36	41	46	KHz
Minimum Output Voltage	V <sub>out</sub> (min)	1400	-	-	Vrms
Efficiency	η	-	80	-	%
Output Current	I <sub>out</sub>	-	6	-	marms
Output Voltage (When powering a Sharp LQ10D367 display.)	V <sub>out</sub>	-	500	-	Vrms
Pin3 Input Current Requirement	-	-	19	-	madc

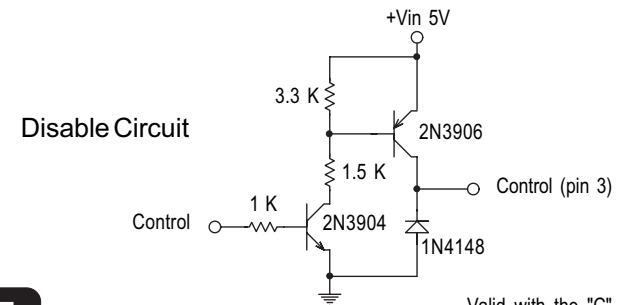
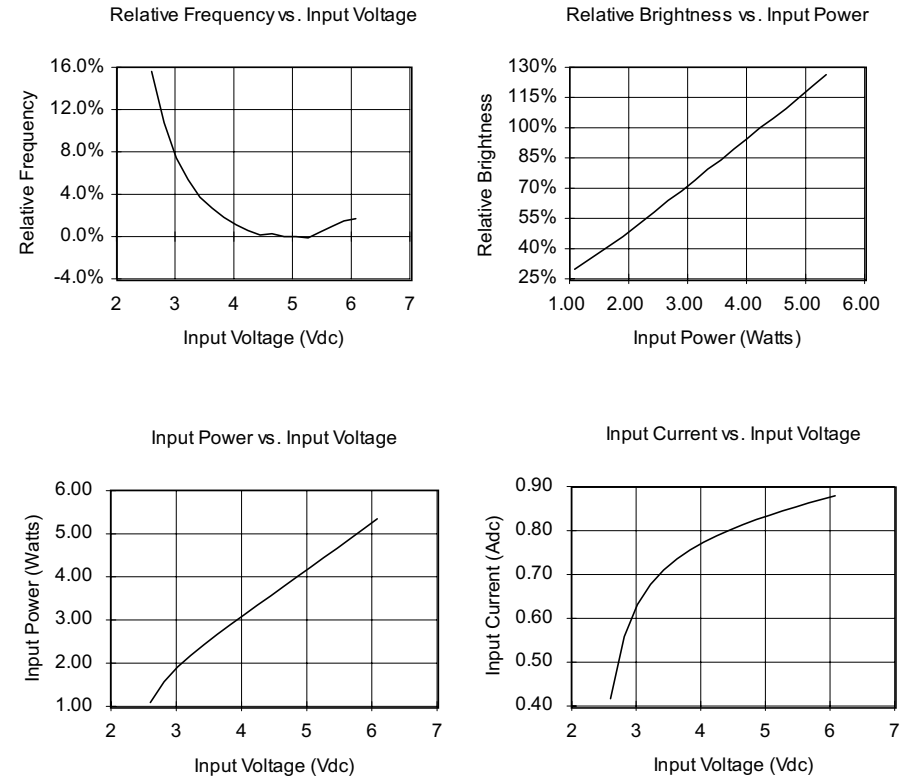
After tube has been allowed to warm-up for 5 minutes External Disable Circuit shown on page 3. Specifications subject to change without notice.



Endicott Research Group, Inc.

Made in USA

**Typical Performance Curves**



Valid with the "C" jumper removed



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