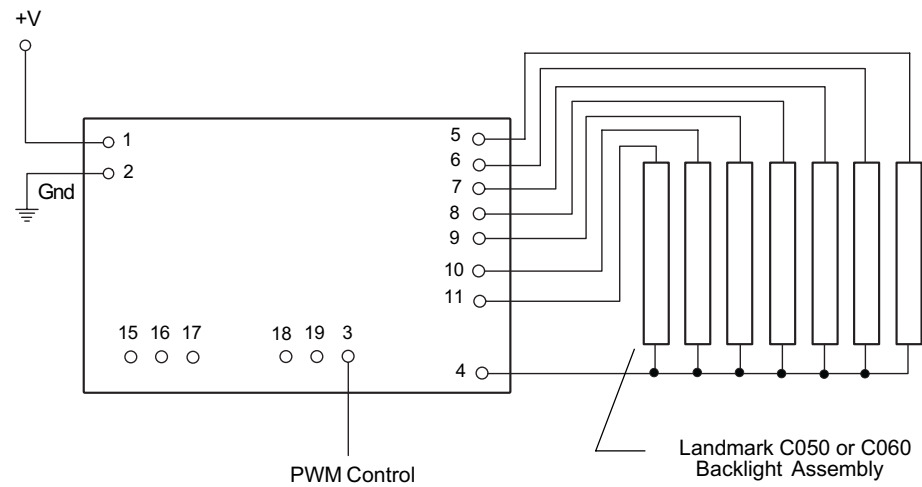


R272242

TYPICAL CONNECTION DIAGRAM



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R272242

**Specifications and Applications Information**

12/03/99

Preliminary

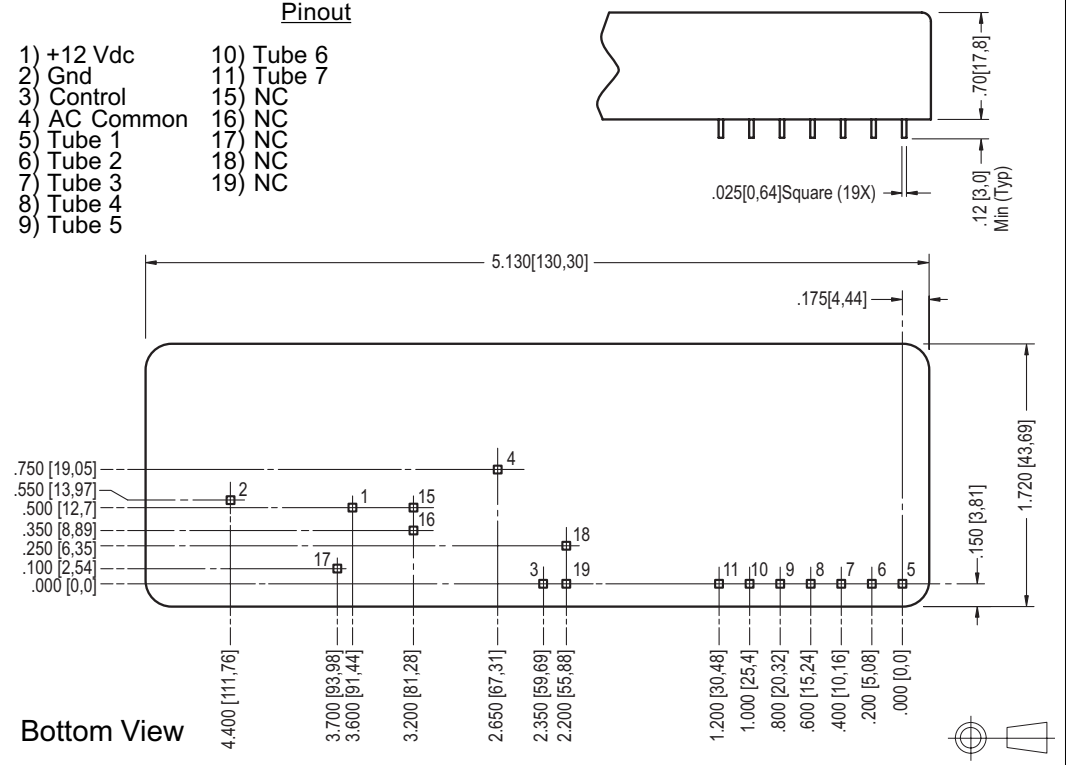
**7 Tube DC to AC Inverter**

The ERG R272242 dc to ac inverter is specifically designed to power 7 tubes of the Landmark C050/C060 backlight assembly. It provides for flicker-free dimming from a digital control input.

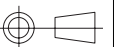
The R272242's high power density, dimming control, and encapsulated package make it the ideal power source for applications where high efficiency and reliability in lighting multiple tube backlights are critical.

**Pinout**

- |              |            |
|--------------|------------|
| 1) +12 Vdc   | 10) Tube 6 |
| 2) Gnd       | 11) Tube 7 |
| 3) Control   | 15) NC     |
| 4) AC Common | 16) NC     |
| 5) Tube 1    | 17) NC     |
| 6) Tube 2    | 18) NC     |
| 7) Tube 3    | 19) NC     |
| 8) Tube 4    |            |
| 9) Tube 5    |            |



Bottom View



ELECTRICAL CHARACTERISTICS

Absolute Maximum Ratings

Rating	Symbol	Value	Units
Input Voltage Range	V <sub>in</sub>	-0.3 to +15	Vdc
Maximum Case Temperature****	T <sub>o</sub>	0 to +85	°C
Storage Temperature	T <sub>stg</sub>	-40 to +85	°C

\*\*\*\*Measured at the geometric center of the top surface.

Recommended Operating Conditions

Rating	Symbol	Value	Units
Input Voltage	V <sub>in</sub>	+10.8 to 13.2	Vdc

Electrical Characteristics

Unless otherwise noted V<sub>in</sub> = 12.00 Volts dc and T<sub>a</sub> = 25°C.

	Characteristic	Symbol	Min	Typ	Max	Units
INVERTER SECTION	Input Current	I <sub>in</sub>	-	2.2	-	A <sub>dc</sub>
	Operating Frequency	F <sub>o</sub>	-	44	-	KHz
	Tube Starting Voltage *	V <sub>start</sub>	1550	-	-	V <sub>rms</sub>
	Efficiency	η	-	83	-	%
	Output Current (per tube) Main CCFTs (7)	I <sub>out</sub>	-	6.4	-	ma <sub>rms</sub>
SHUT-DOWN SECTION	Output Voltage ** Main CCFTs (7)	V <sub>out</sub>	-	485	-	V <sub>rms</sub>
	CCFT Control Level (Pin 3) CCFT Output Off CCFT Output On		2.2		1.5	V <sub>dc</sub>
	CCFT Control Pin Sink Current			1.1	1.4	ma <sub>dc</sub>

\* Valid over entire operating temp. range

\*\* Measured, not guaranteed  
Specifications subject to change without notice



Endicott Research Group, Inc.

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Typical Performance Curves

FIGURE 6 - TUBE FREQUENCY VS. INPUT VOLTAGE

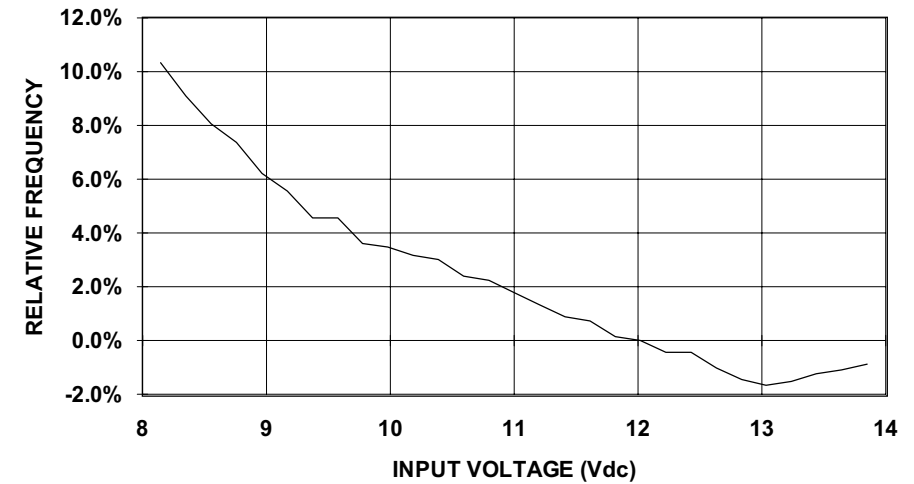
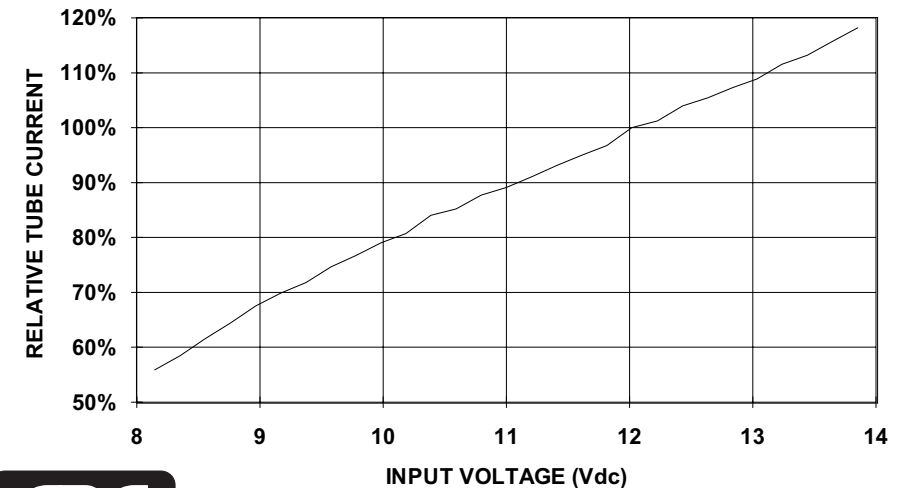


FIGURE 7 - TUBE CURRENT VS. INPUT VOLTAGE



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