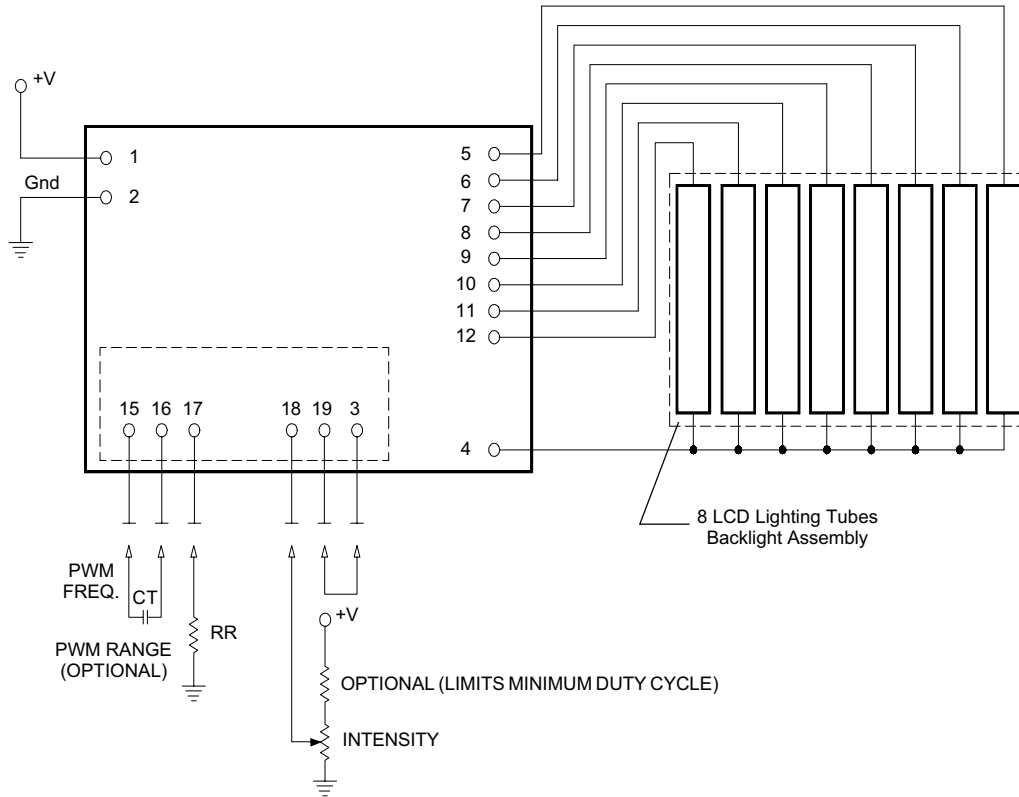


R282258

FIGURE 4- TYPICAL CONNECTION UTILIZING INTERNAL PWM GENERATOR



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R282258

## Specifications and Applications Information

6/1/99

Preliminary

8 Tube  
DC to AC Inverter

The ERG R282258 dc to ac inverter is specifically designed to power 8 tubes of the Landmark BL-C073 backlight assembly. It provides for flicker-free dimming from either an analog or digital control input.

The R282258'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.

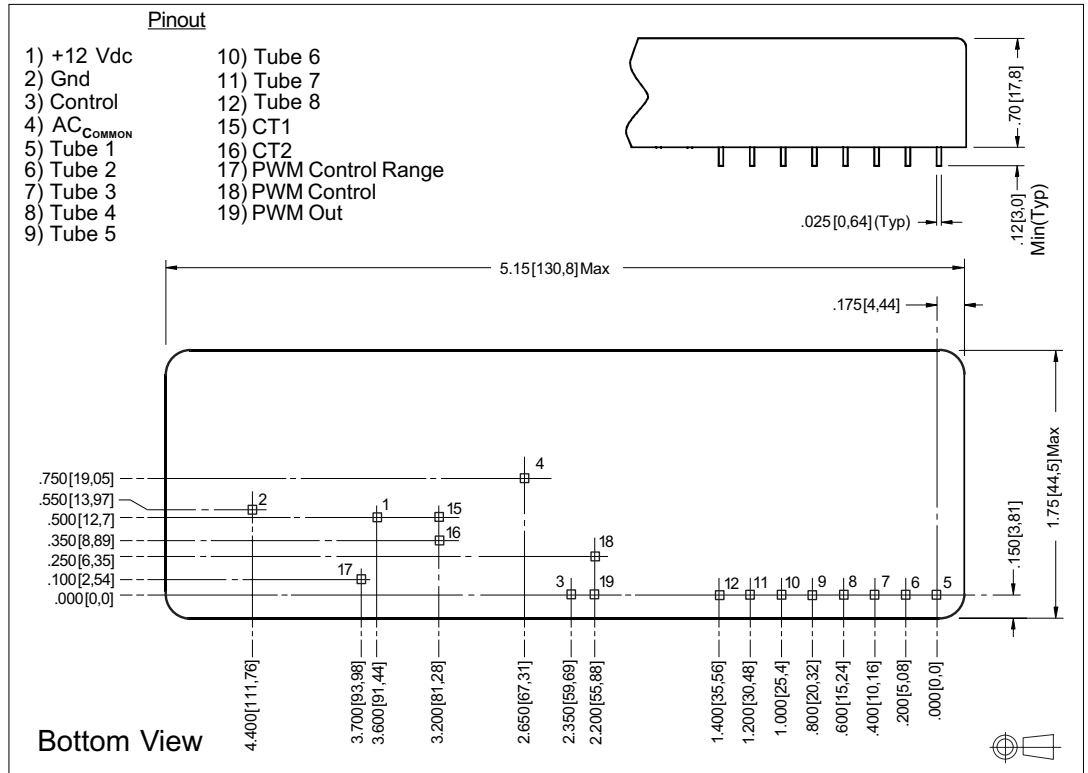


FIGURE 1 - ELECTRICAL CHARACTERISTICS

Absolute Maximum Ratings

Rating	Symbol	Value	Units
Input Voltage Range	V <sub>in</sub>	-0.3 to +15	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>	+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
Input Current	I <sub>in</sub>	-	2.0	-	A <sub>dc</sub>
Operating Frequency	F <sub>o</sub>	-	35	-	KHz
Tube Starting Voltage *	V <sub>start</sub>	1160	-	-	V <sub>rms</sub>
Inverter Efficiency	η	-	88	-	%
Tube Operating Current (per tube)	I <sub>o</sub>	-	6.5	-	mA <sub>rms</sub>
Tube Sustaining Voltage (per tube) **	V <sub>s</sub>	-	385	-	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>
PWM Frequency Range		50		1000	Hz
PWM Frequency ***			180		Hz
PWM Control Voltage (Pin 18)		0		+V <sub>in</sub> -2	V <sub>dc</sub>
Input Bias Current (Pin 18)			45	250	nA <sub>dc</sub>
PWM Control Range Program Resistance (Pin 17)		1			Kohm
PWM Output Level (Pin 19) Low High		10	5 11	50	mV <sub>dc</sub> V <sub>dc</sub>

\* Valid over entire operating temp. range

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

INVERTER SECTION

SHUT-DOWN SECTION

INTERNAL PWM GENERATOR



Endicott Research Group, Inc.

Typical Performance Curves  
(No Dimming)

FIGURE 6 - TUBE FREQUENCY VS. INPUT VOLTAGE

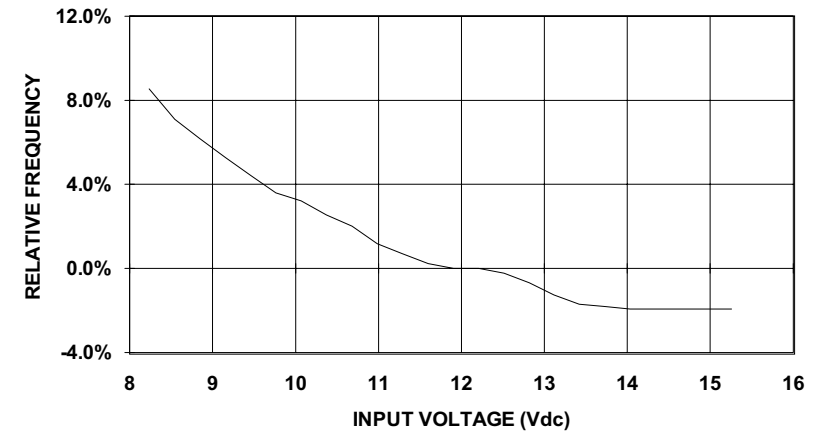
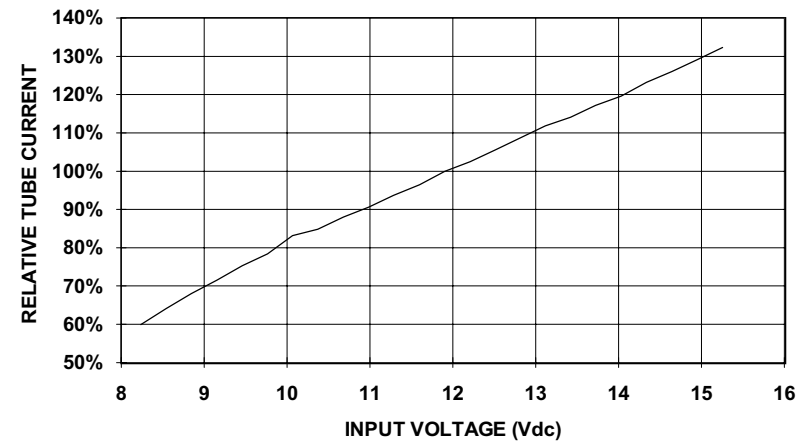


FIGURE 7 - TUBE CURRENT VS. INPUT VOLTAGE



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