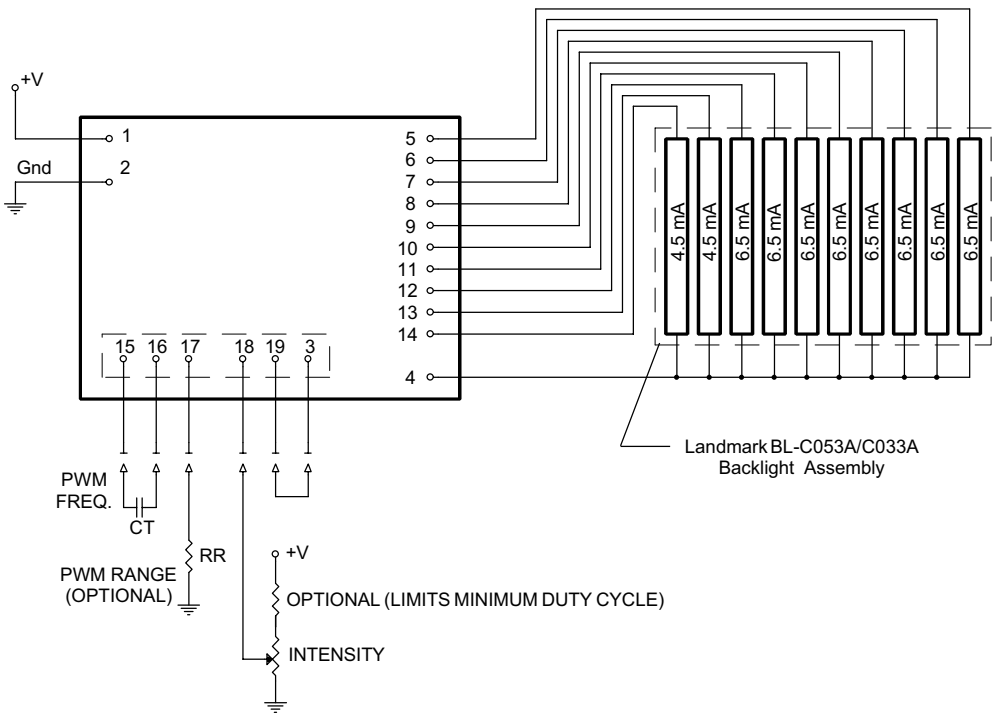


R402272

FIGURE 10 - TYPICAL CONNECTION UTILIZING INTERNAL PWM GENERATOR



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R402272

Specifications and Applications Information

8/27/99

Preliminary

10 Tube
DC to AC Inverter

The ERG R402272 dc to ac inverter is specifically designed to power the Landmark BL-C053/C033A 10 tube LCD backlight module. It provides for flicker-free dimming from either an analog or digital control input.

The R402272'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.

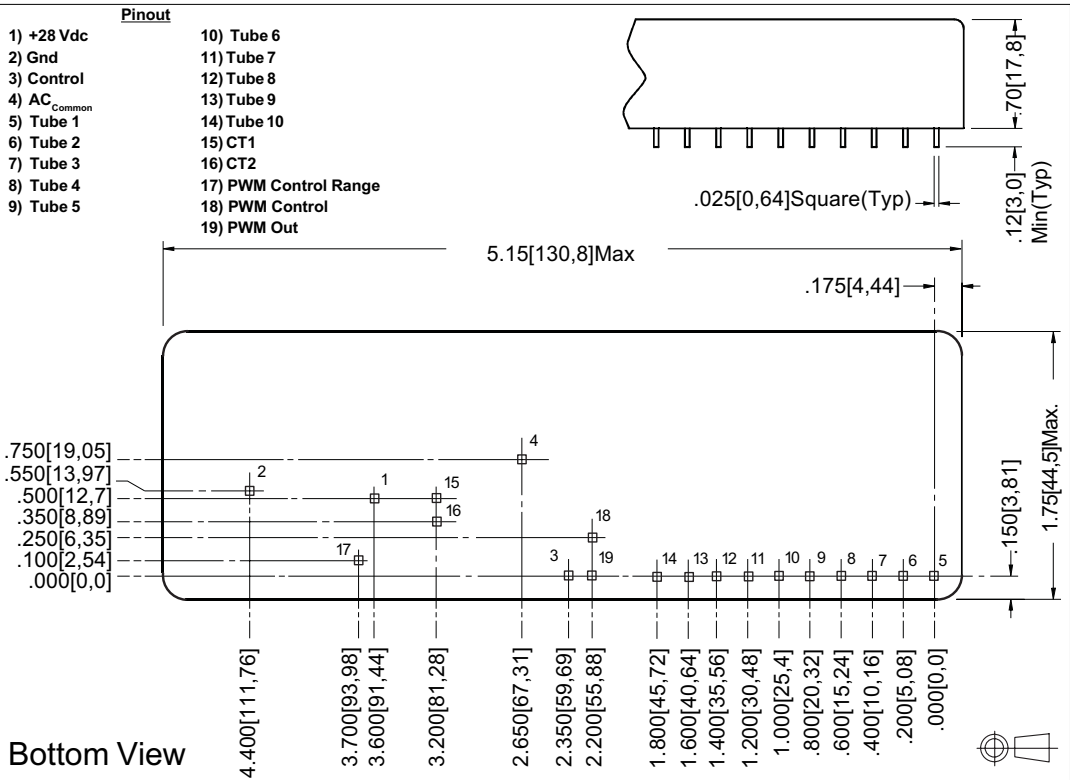


FIGURE 1 - ELECTRICAL CHARACTERISTICS

Absolute Maximum Ratings

Rating	Symbol	Value	Units
Input Voltage Range	Vin	-0.3 to +34.0	Vdc
Operating Temperature	To	0 to +50	°C
Storage Temperature	Tstg	-40 to +85	°C

Recommended Operating Conditions

Rating	Symbol	Value	Units
Input Voltage	Vin	+18 to 32	Vdc

Electrical Characteristics

Unless otherwise noted Vin = 28.00 Volts dc and Ta = 25°C.

INVERTER SECTION

SHUT-DOWN SECTION

INTERNAL PWM GENERATOR

Characteristic	Symbol	Min	Typ	Max	Units
Input Current	Iin	-	0.95	-	Adc
Operating Frequency	Fo	-	30	-	KHz
Tube Starting Voltage *	Vstart	1160	-	-	Vrms
Efficiency	η	-	87	-	%
Output Current (per tube) Main CCFTs (8) Supplemental CCFTs (2)	Iout	-	6.5 4.5	-	marms
Output Voltage ** Main CCFTs (8) Supplemental CCFTs (2)	Vout	-	395 325	-	Vrms
CCFT Control Level (Pin 3) CCFT Output Off CCFT Output On		2.2	-	1.5	Vdc
CCFT Control Pin Sink Current			1.1	1.4	madc
PWM Frequency Range		50		1000	Hz
PWM Frequency ***			180		Hz
PWM Control Voltage (Pin 18)		0		+Vin-2	Vdc
Input Bias Current (Pin 18)			45	250	nAdc
PWM Control Range Program Resistance (Pin 17)		1			Kohm
PWM Output Level (Pin 19) Low High		23	12 27	120	mVdc Vdc

* Valid over entire operating temp. range
*** CT = .33uF Across Pins 15 & 16, see test circuit Figure 8

** Measured, not guaranteed



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Typical Performance Curves
(No Dimming)

FIGURE 6 - TUBE FREQUENCY VS. INPUT VOLTAGE

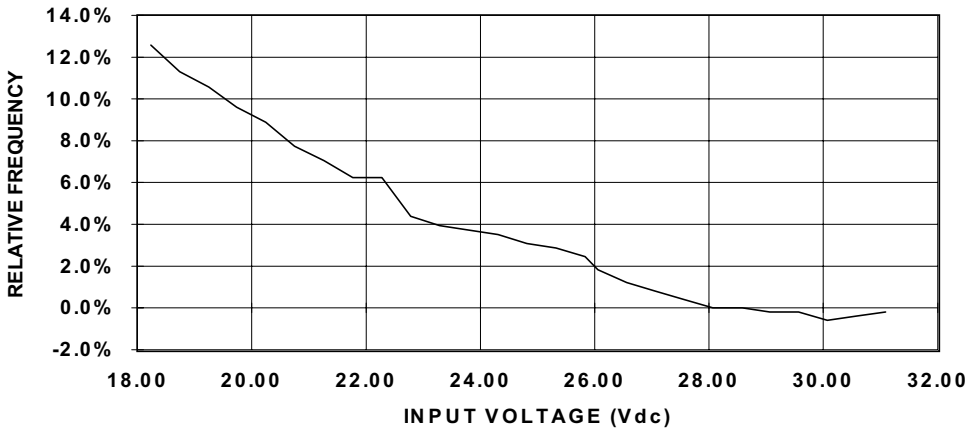
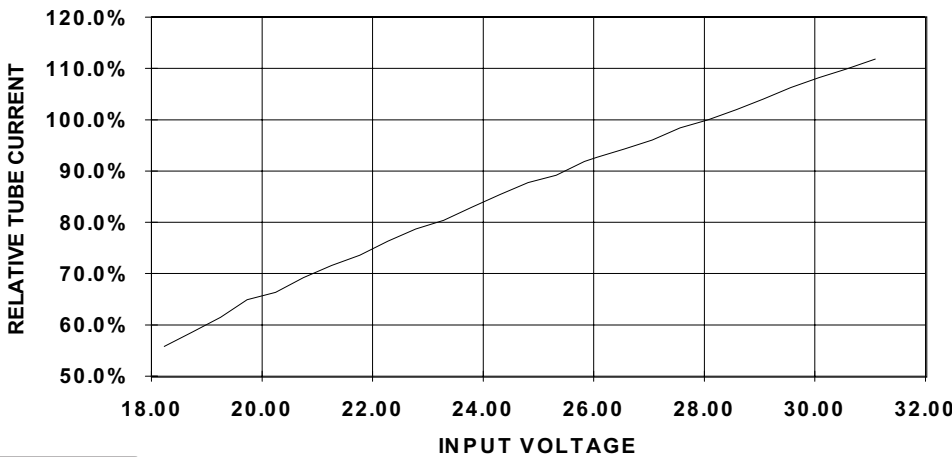


FIGURE 7 - TUBE CURRENT vs. INPUT VOLTAGE



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