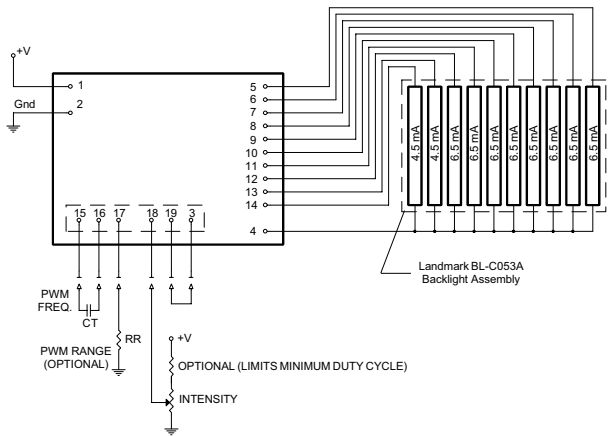


R202243

FIGURE 10 - TYPICAL CONNECTION UTILIZING INTERNAL PWM GENERATOR



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R202243

Specifications and Applications Information

4/23/99

Preliminary

**10 Tube
DC to AC Inverter**

The ERG R202243 dc to ac inverter is specifically designed to power the Landmark BL-C053A 10 tube LCD backlight module. It provides for flicker-free dimming from either an analog or digital control input.

The R202243'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.

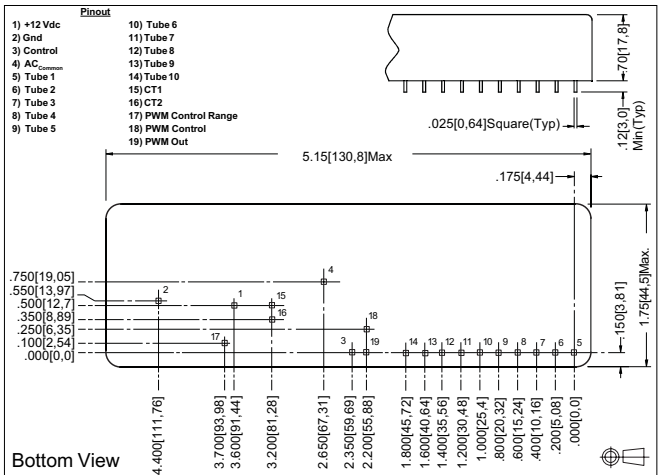


FIGURE 1 - ELECTRICAL CHARACTERISTICS

Absolute Maximum Ratings

Rating	Symbol	Value	Units
Input Voltage Range	Vin	-0.3 to +15.0	Vdc
Operating Temperature	Tb	0 to +70	°C
Storage Temperature	Tstg	-40 to +85	°C
Case Temperature	Tcase	85	°C

Recommended Operating Conditions

Rating	Symbol	Value	Units
Input Voltage	Vin	+10.2 to 13.8	Vdc

Electrical Characteristics

Unless otherwise noted Vin = 12.00 Volts dc and Ta = 25°C.

Characteristic	Symbol	Min	Typ	Max	Units
Input Current	Iin	-	2.34	-	Adc
Operating Frequency	Fo	-	30	-	KHz
Tube Starting Voltage *	Vstart	1160	-	-	Vrms
Efficiency	η	-	84	-	%
Output Current (per tube) Main CCF _T (8) Supplemental CCF _T (2)	Iout	-	6.5 4.5	-	marms
Output Voltage ** Main CCF _T (8) Supplemental CCF _T (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	-	10	5 11	50	mVdc Vdc

INVERTER SECTION

SHUT-DOWN SECTION

INTERNAL PWM GENERATOR

* 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

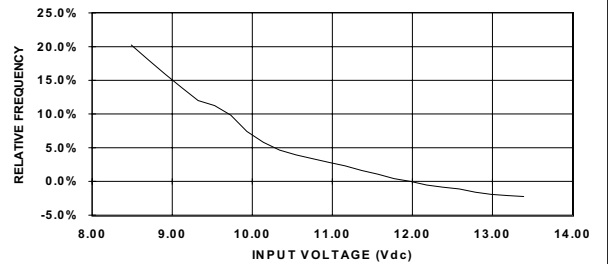
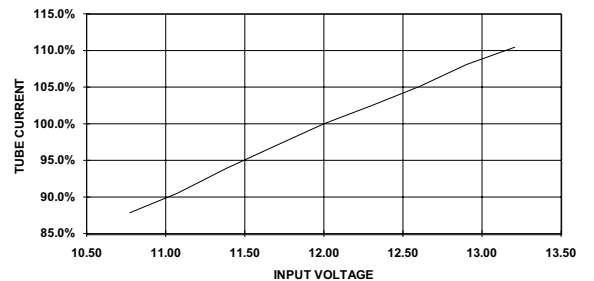


FIGURE 7 - TUBE CURRENT vs. INPUT VOLTAGE



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