

# APPLIED CONCEPTS INC.

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# ACB-12-1238

## PRODUCT DATA SHEET

2/19/02

### CCFL INVERTER

(For Multiple Tube Applications)

The ACB-12-1238 is designed to power 6 CCFL's to a nominal power level of 26 watts from an input voltage of +12V.

The ACB-12-1238 features analog dimming control via a dc control level of 0V(off) to +5V(on) @ pin 7 of CON1. A dc reference voltage(+5V) is available @ pin 6 of CON1 for external use.

Enable control (0V=off, +5V=on) is accomplished @ pin 5 of CON1.

As an option, a vertical sync signal can be accepted @ pin 9 of CON1 for locking the pwm frequency to the vertical refresh rate.

All outputs are open and short circuit protected.

This inverter is designed and is direct plug-in/mounting compatible for the Sharp LQ181E1LW31.

#### Specifications:

Vin = +12V +/- 10%

CCFL strike voltage = 2000Vrms @ Vin=12V

CCFL tube current = 6.0mA/tube @ 100% intensity/Vin=12V

Recommended CCFL sustaining voltage = 600Vrms - 850Vrms

Nominal tube current frequency = 68khz +/- 10%

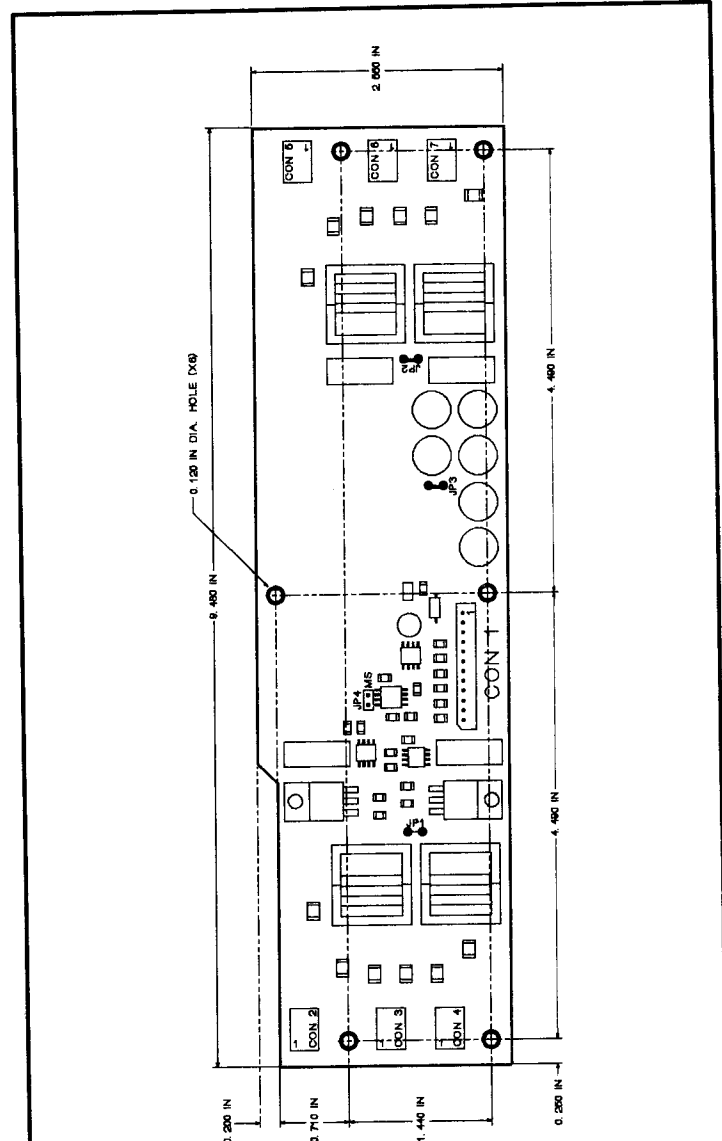
Nominal pwm frequency(free-run) = 98Hz +/- 3%

Pwm duty cycle range = 0 to 100%

Maximum reference voltage current draw(CON1, pin 6) = 10mA

VSYNC input requirements = 60Hz nominal, 5V negative going (NOTE: Absence of Vsync will cause the unit to free-run @ 98Hz nominal. Also Vsync input should be tied to ground if not used.

Average electrical efficiency > 90%



PROFILE < 0.575 IN

INPUT CONNECTOR  
CON1  
MOLEX 22-03-5125

OUTPUT CONNECTOR(S)  
CON2-CON7  
JST SM02B-BHSS-1

PIN #	FUNCTION	PIN #	FUNCTION
1,2	+VIN	1	CCFL HOT
3,4	GND(POWER)	2	CCFL COLD
5	ENABLE		
6	+5V OUT		
7	VCNTL		
8	GND(SIGNAL)		
9	VSYNC IN(OPTIONAL)		
10	GND(SIGNAL)		
11	TBD		
12	GND(SIGNAL)		