

APPLIED CONCEPTS INC.

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ACB-12-1241

PRODUCT DATA SHEET

11/03/03

CCFL INVERTER

(For Multiple Tube Applications)

The ACB-12-1241 is designed to power 6 CCFL's to a nominal power level of 34 watts from an input voltage of +12V.

The ACB-12-1241 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 compatible for the Samsung LTM213U3-L02.

Specifications:

Vin = +12V +/- 10%

CCFL strike voltage = 2400Vrms

CCFL tube current = 6.5mA/tube @ 100% intensity

Recommended CCFL sustaining voltage = 750Vrms - 950Vrms

Nominal tube current frequency = 34khz +/- 10%

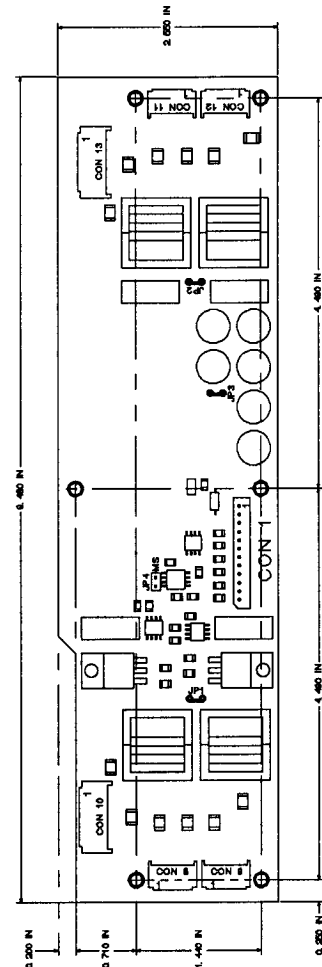
Nominal pwm frequency(free-run) = 98Hz +/- 3%

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

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

OUTPUT CONNECTORS
CON8,CON9,CON11,CON12
JST SM03(4.0)B-BHS-1-TB

PIN #	FUNCTION
1	CCFL HOT
2	NC
3	CCFL COLD

OUTPUT CONNECTORS
CON10,CON13
JST SM04(4.0)B-BHS-1-TB

PIN #	FUNCTION
1	CCFL HOT
2	NC
3	NC
4	CCFL COLD