

**APPLIED
CONCEPTS INC.**

397 Route 281 - P.O. BOX 1175
Tully, New York 13159-1175
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www.acipower.com

ACQ-12-1454

PRODUCT OVERVIEW SHEET - PAGE 1 OF 2

CCFL INVERTER

(For Dual Tube Applications)

8/04/05

GENERAL DESCRIPTION

The ACQ-12-1454 is designed to power 2 CCFL's at a nominal power level of 3.5 watts per tube.

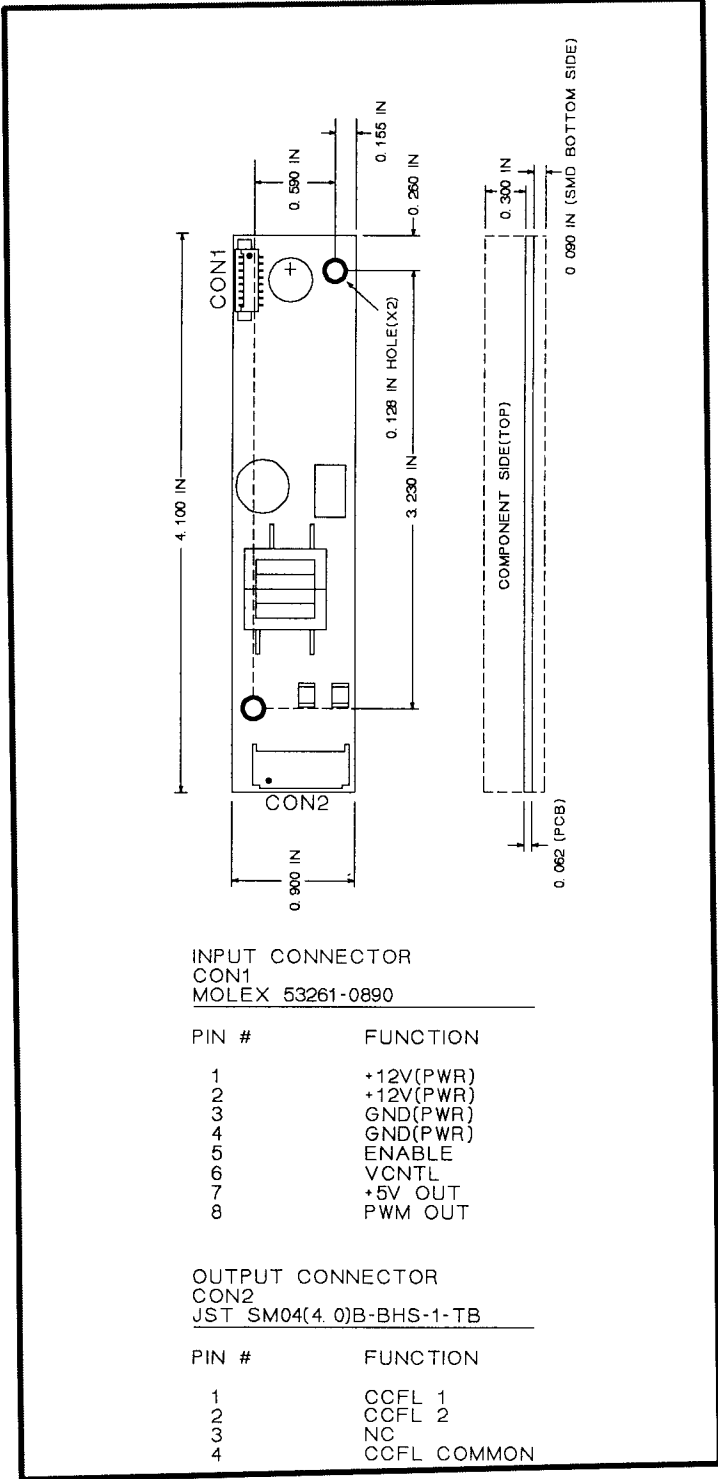
The ACQ-12-1454 features analog dimming control via a dc control level @ pin 6 of CON1. A dc reference voltage(+5V) is available @ pin 7 of CON1 for external use.

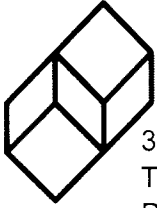
Enable control is accomplished @ pin 5 of CON1.

All outputs are open and short circuit protected.

MECHANICAL / ENVIRONMENTAL

Weight = 21.5 grams
Altitude = 10,000 Ft maximum
Humidity < 85% non-condensing
Size (L x W x H) = 4.1 IN x 0.9 IN x 0.452 IN
PCB thickness = 0.062 IN
Mounting Holes = 0.128 IN diameter (X2)
Input Power & Control Connector = CON1
CCFL Output Connector = CON2





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PRODUCT DATA SHEET - PAGE 2 OF 2

MAXIMUM RATINGS*

8/4/05

Symbol	Parameter	Value	Unit
Vin	Supply Voltage (Referenced to Ground)	-0.7 to 14	Vdc
Vip	Voltage applied to any Input Pin (Referenced to Ground)	-0.7 to 5.7	Vdc
Iop	Current sourced or sinked from any Output Pin	+/- 10	mAdc
Pin	Input Power (DC Input Voltage x DC Input Current)	9	W
Top	Operating Temperature (Still air ambient around Inverter)	0 to +70	DegC
Tstg	Storage Temperature	-20 to +105	DegC

* Maximum Ratings are those values beyond which damage to the inverter may occur

RECOMMENDED OPERATING CONDITIONS

Symbol	Parameter	Min	Max	Unit
Vin	Supply Voltage (Referenced to Ground)	10.8	13.2	Vdc
Lsv	Cold Cathode Flourescent Lamp Sustaining Voltage	480	680	Vrms
Vcntl	Intensity Control Voltage	0	5	Vdc

ELECTRICAL CHARACTERISTICS

Vin = +12V, Lsv = 580Vrms, Vcntl = +5V, ENon = +5V unless otherwise specified

Symbol	Parameter	Test Conditions	Min	Max	Unit
Lstart	Lamp Starting Voltage		1500		Vrms
Lout	Lamp Output Current	PWM Duty Cycle @ 100%	5.7	6.3	mArms
Lfreq	Lamp-Current Frequency		44	54	Khz
Pfreq	PWM Dimming Frequency	Vcntl (Pin 6) = +2.5V	95	101	Hz
Pdc	PWM Duty Cycle Range	Vcntl (Pin 6) = 0 to +5V	1	100	%
ENoff	Enable Control, unit OFF (Pin 5)			0.5	Vdc
ENon	Enable Control, unit ON (Pin 5)		2.0		Vdc
Pout	PWM Output Signal (Pin 8)	Vcntl = +2.5V, 10K load to ground			
	Hi		4.6	5.3	Vdc
	Lo		0	0.7	Vdc
+5Vout	+5V Reference Out (Pin 7)	10k load to ground	4.6	5.3	Vdc
Iin	Input Current Draw			0.7	Adc
Eff	Electrical Efficiency		88		%