APPLIED CONCEPTS INC.
397 Route 281 - P.O. BOX 1175
Tully, New York 13159-1175
Phone: (315) 696-6676 Fax: (315) 696-9923
www.acipower.com

AC7-A2-1547

CCFL INVERTER

07/06/05

(For Dual Tube Applications)

GENERAL DESCRIPTION

This AC7-A2-1547 is designed to power typically 2 CCFL's up to power levels of 5 watts from a nominal +12V source

Ambient light sensor for intensity control is connected across pin 3 and 4 of CON1

All outputs are open and short circuit protected.

MECHANICAL / ENVIRONMENTAL

Weight = 14.1 grams

Altitude = 10,000 Ft maximum

Humidity < 85% non-condensing

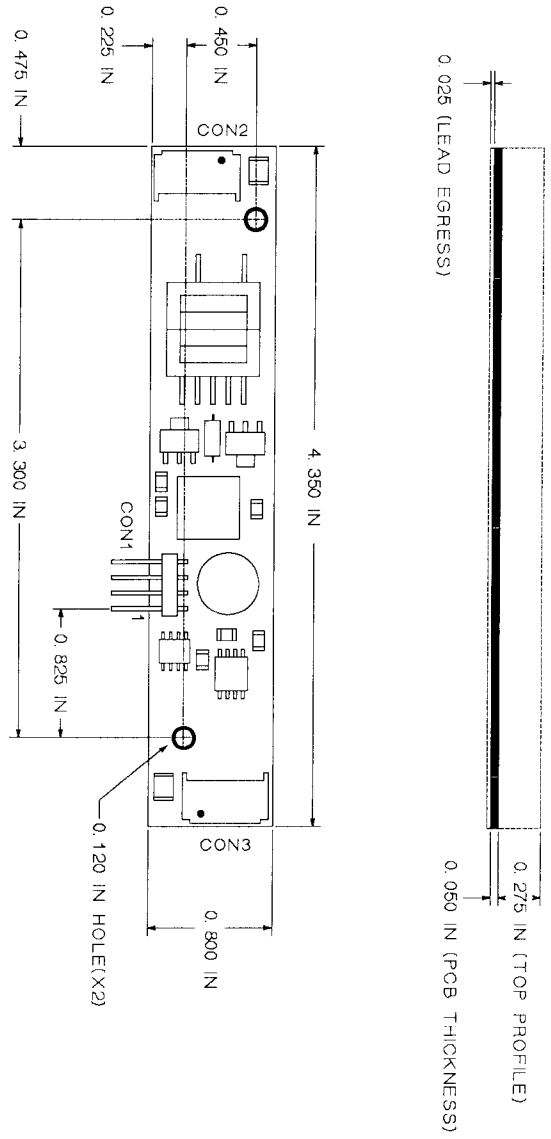
Size (L x W x H) = 4.35 IN x 0.8 IN x 0.35 IN

PCB thickness = 0.047 IN

Mounting Holes = 0.120 IN diameter (X2)

Input Power & Control Connector = CON1

CCFL Output Connectors = CON2, CON3



INPUT CONNECTOR
CON1
MOLEX 22-28-8041

PIN #	FUNCTION
1	+12V
2	GND
3	ALS
4	ALS

OUTPUT CONNECTOR
CON3
JST SM03(4.0)B-BHS-1-TB

PIN #	FUNCTION
1	CCFL HOT
2	NC
3	CCFL COLD

APPLIED CONCEPTS INC.
397 Route 281 - P.O. BOX 1175
Tully, New York 13159-1175
Phone: (315) 696-6676 Fax: (315) 696-9923
www.acipower.com

AC7-A2-1547

MAXIMUM RATINGS*

07/06/05

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)	7	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	250	450	Vrms
CDS	CDS dark to light nominal range	5	200	Kohm

ELECTRICAL CHARACTERISTICS

Vin = +12V, Lsv = 350Vrms, Pdc@ 100% .

Symbol	Parameter	Test Conditions	Min	Max	Unit
Lstart	Lamp Starting Voltage		1450		Vrms
Lout	Lamp Output Current		6.3	7.7	mArms
Lfreq	Lamp-Current Frequency		47	58	Khz
Pfreq	PWM Dimming Frequency	10kohm across pins 3 & 4	95	101	Hz
Pdc	PWM Duty Cycle Range	CDS Dark to Light	2	100	%
CDS_l	Light sensor resistance	10 Lux light	3	20	Kohm
CDS_d	Dark sensor resistance	After 10 second removal of 100 Lux	500		Kohm
+5Vout	+5V Reference Out (Pin 4)	10k load to ground	4.6	5.25	Vdc
Iin	Input Current Draw			0.525	Adc
Eff	Electrical Efficiency		85		%