

**APPLIED  
CONCEPTS INC.**

397 Route 281 - P.O. BOX 1175  
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Phone: (315) 696-6676 Fax: (315) 696-9923  
[www.acipower.com](http://www.acipower.com)

**AC7-V2-1544**

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**CCFL INVERTER**  
*(For Dual Tube Applications)*

06/24/05

**GENERAL DESCRIPTION**

This AC7-V2-1544 is designed to power typically 2 CCFL's up to power levels of 7.5 watts from a nominal +12V source

Analog dimming control is accomplished via a dc control level @ pin 3 of CON1.

If desired, the pwm dimming frequency of the inverter can be synchronized to the LCD frame rate via pin 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

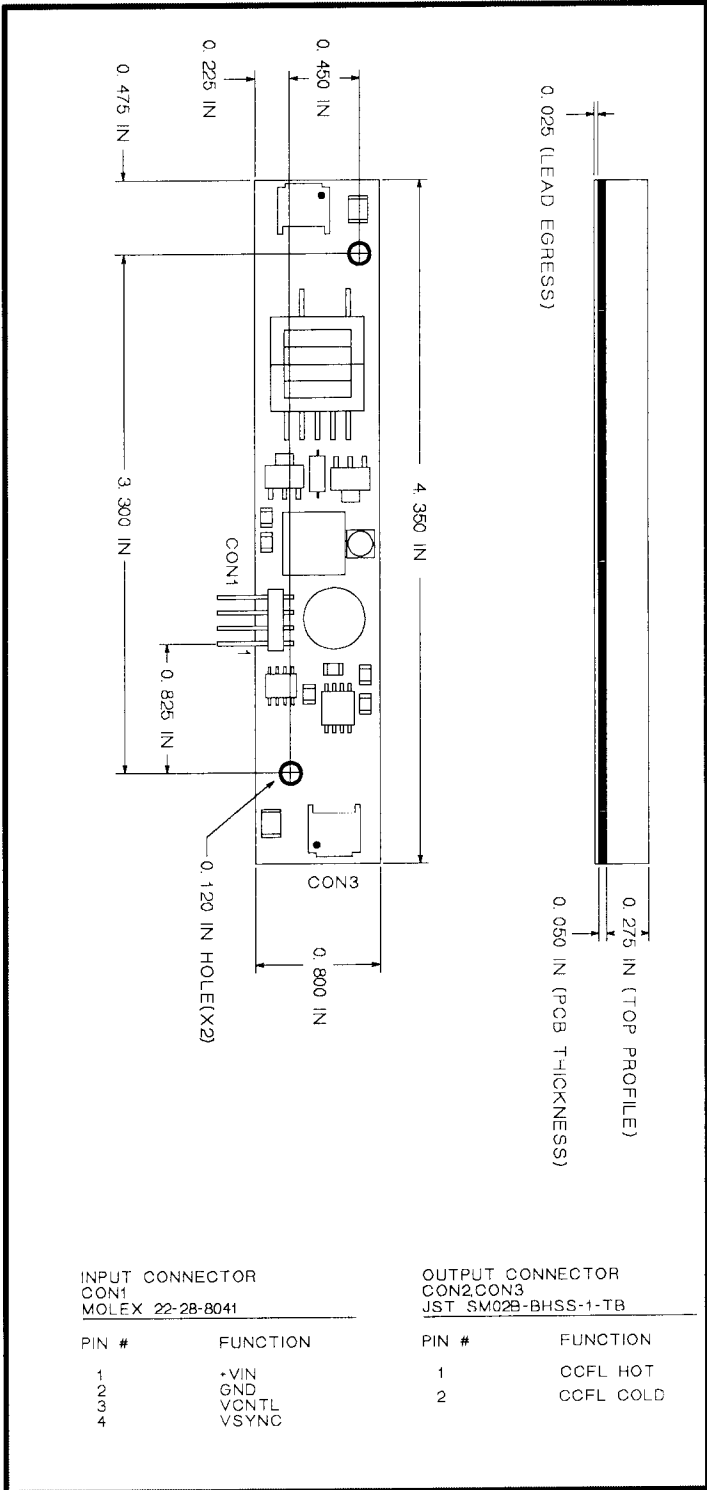
Size (L x W x H) = 4.35 IN x 0.8 IN x 0.35 IN

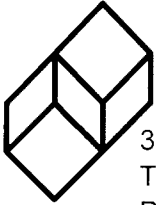
PCB thickness = 0.047 IN

Mounting Holes = 0.120 IN diameter (X2)

Input Power & Control Connector = CON1

CCFL Output Connectors = CON2, CON3





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## MAXIMUM RATINGS\*

06/24/05

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)	11	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	540	900	Vrms
VSYif	Vertical Sychronization Input Frequency	48	62	Hz
Vcntl	Intensity Control Voltage	0.5	4.5	Vdc

## ELECTRICAL CHARACTERISTICS

Vin = +12V, Lsv = 720Vrms, Vcntl = +4.5V, Enable = +5V unless otherwise specified

Symbol	Parameter	Test Conditions	Min	Max	Unit
Lstart	Lamp Starting Voltage		1650		Vrms
Lout	Lamp Output Current		4.8	5.8	mArms
Lfreq	Lamp-Current Frequency		39	45	Khz
Pfreq	PWM Dimming Frequency	Vcntl (Pin 3) = +2.5V Vsync-In (Pin 4) = 0V Vsync-In (Pin 4) = 60Hz	95 119.8	101 120.2	Hz Hz
VSYhi	Vertical Sync In HI Level	(Pin 4)	3.5		Vdc
VSYlo	Vertical Sync In LO Level	(Pin 4)		0.7	Vdc
Iin	Input Current Draw			0.820	Adc
Eff	Electrical Efficiency		85		%