AGL Applied Green Light, Inc.
台灣應用光源

PART. NO.: KE-12LED-1L1933

REV. NO.: 1.0A ISSUE DATE: 2011/04/18

SPECIFICATION for APPROVAL

規 格 承 認 書

CUSTOMER:

CUSTOMER PART NO:

PRODUCT: LED Backlight Driver

PART NO: KE-12LED-1L1933

ISSUE DATE: Apr 18, 2011

APPROVED BY:

若蒙承認，請簽回一份。如未知會任何修改，本公司將以此文件爲生產交貨依據。

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WRITEN BY	CHECKED BY	APPROVED BY	SPECIAL NOTE:

SPECIFICATION for APPROVAL

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0. Revision History

ITEM NO.	DATE	DESCRIPTION
01	2011/04/18	Initial Issue KE-12LED-1L1933 Rev. 1.0A
02		
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SPECIFICATION for APPROVAL

1. Product Purpose And General Description

Powered by a regulated 12 Volt DC power source, the KE-12LED-1L1933 is designed to drive 6 strings of LED backlight Module.

It has been optimized for LED backlight as the following LIST:

LED SIZE	LCM Model	Brand	Remark
		Applied Green Light, Inc.	

This product has the following features:

- ☑ Open LED protection.
- ☑ Constant LED current.
- ☑ 100% Full-Load Tested.
- ☑ Designed, Manufactured in Taiwan and Supported Worldwide.

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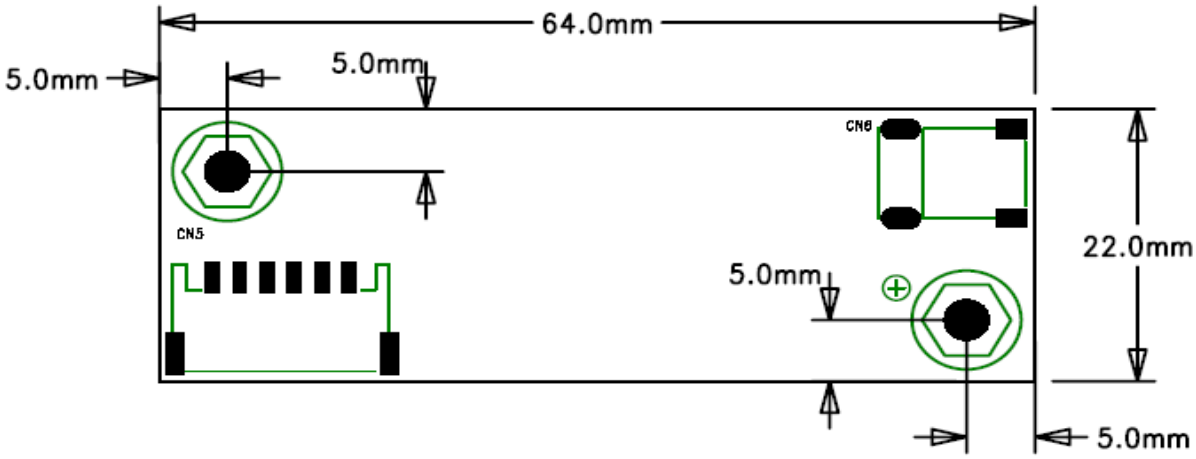
2. Physical Dimension, Pin & Connector Assignment

Physical Dimension:



Note:

1. UNIT: mm
2. SIZE: 64 mm × 22 mm × 7.6 mm
3. PCB Thickness 1.6 mm
4. The Height of Top-side is 6.0 mm (Max)
5. The Height of Bottom-side is 0.0 mm

Pin & Connector Assignment:

CN5: CviLux CI0106M1HR0-LF or Equivalent

Pin No	Symbol	Description
1	VIN	DC +12V
2	VIN	DC +12V
3	ON/OFF	OFF=0V
		ON=+3V
4	DIM	MIN BRIGHTNESS: 3V
		MAX BRIGHTNESS: 0V
5	GND	GROUND
6		GROUND

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CN6 : CviLux CP05-2-P1MRO or Equivalent

Pin No	Symbol	Description
1	LED +	Positive
2	LED -	Negative

3. Absolute Maximum Ratings (Note 1)

Rating	Symbol	Value	Units
Input Voltage	$V_{in,man}$	+13.5	V_{DC}
Operating Temperature	$T_{a,max}$	-10 -- +50	℃
Storage Temperature	$T_{s,max}$	-20 -- +80	℃
Operating Humidity (without dewdrop)	$H_{a,max}$	80 %	R.H
(without dewdrop)	$H_{s,max}$	95 %	R.H

(Note 1):
Reliable and predictable operation of the device is not guaranteed with applied stresses at or beyond those listed in “Absolute Maximum Ratings”. Operation at these limits may reduce device reliability and is therefore not recommended. Please refer to “Recommended Operating Conditions” for reliable operation of the device.

4. Recommended Operating Conditions (Note 2)

Rating	Symbol	Value	Units
Input Voltage	V_{in}	11.4 ~ 12.6	V_{DC}
Operating Temperature	T_a	20 ~ 40	℃
Operating Humidity	$H_{a,max}$	40 ~ 60 %	R.H

(Note 2):
Reliable operation above 50℃ is possible if airflow is provided.

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5. Electrical Characteristics and Specifications (Note 3)

Unless otherwise noted V_{in}=12.0 Volts DC, T_a=25℃ and unit has been running for over 30 minutes.

Parameter	Symbol	Min.	Typ.	Max.	Unit	Remarks (Test Condition)
Input Specification						
Input Voltage	**V_{in}**	10.8	12.0	13.2	V_{DC}	
Input Current	**I_{in}**	0.28	0.33	0.38	A_{DC}	
On/Off control	**ON/OFF**	-	3.0	-	V_{DC}	ON STATE
		-	0	-		OFF STATE
Dimming Control	**DIM**	-	3	-	V_{DC}	MIN BRIGHTNESS
		-	0	-		MAX BRIGHTNESS
Output Specification						
LED Forward Voltage (Refer to the specification of light bar)	**V_f**	-	17	-	V_{DC}	
LED Forward Current	**I_f**	**315**	**330**	**345**	mA_{DC}	

(Note 3)

Manufactured by Applied Green Light Inc., has been applied for all the measurements.