

# 部品 认可书

CHTECH

制作部门:	开发部	保存期限:	长期	档案编号	QTR/0070022
制作人员:	陈大东	制作日期:	2010.7.17		
物料编码	7.02.AY21LD001R	适应机型	LEP18.5/21.6群创屏	供应商	奥源
物料名称	恒流源	检验数量	3	产品类别/规格型号	
本体标识	AY21LD-00502	认可原因:	新物料	2010年7月7日	

检验及测试项目		检验及测试项目							判定	
	NO.	试验标准/要求	样品实测尺寸(室温25±2℃)							
			SPL1	SPL2	SPL3	SPL4	SPL5			
外观检验	尺寸	1	120±0.17	120.09	120.10	120.07			OK	
		2	30±0.17	30.10	30.13	30.10			OK	
		3								
		4								
	外观	锡面良好, 丝印清晰, 单面板							OK	
	可焊性	—								
	电性能测试	电压	输入: 12V 输出: 24V							OK
		电流	输入: 1.1A Max 输出: 0.36A							OK
功率		15W							OK	
温度		T <sub>ope</sub> = 0℃~50℃ T <sub>store</sub> = -20℃~70℃							OK	
认证	6、环保认证									
其它	有									

\*测试所需设备仪器 数显卡尺、LCR电桥等

\*重点管理部分应在检验及测试项目前标记“\*”

\* 随附资料 规格书-1份

判定		检验			
<input checked="" type="checkbox"/>	正式认可	测试	审核	品质部	批准
<input type="checkbox"/>	限量认可 件	陈大东 2010.7.17	郭昭 2010.7.19	郭昭 2010.7.19	李彦 2010.7.19
<input type="checkbox"/>	不予认可				
分发处	文控中心1份、开发部1份、IQC1份、供应商1份				



奥源电子科技有限公司  
AOYUAN ELECTRONICS TECHNOLOGY CO.,LTD

广东省东莞市长安镇振安科技园区A7栋  
TEL: +86 0769-81589595  
Http://www.ay-power.com

Building A7 Zhen'An Technological  
Industrial Park, ChangAn Town, Dong  
Guan City, Guang Dong P.R. China  
Fax: +86 0769-85473586

# SPECIFICATION

Customer(客户) \_\_\_\_\_

Product Name

产 品 类 别                      LED 恒流板

Model Name

产 品 名 称                      AY21LD-06S02

Description

产 品 描 述                      15W 六组输出

Manufacturer

承 制 方

Made 拟制	Checked 审核	Approved 批准

Customer

客 户

Checked 审核	Approved 批准

Document History

No.	Description	Modified By	Version	Date	Approved By
1	first released				

# **Table of Content**

## **1. Scope (范围)**

## **2. Feature (特征)**

## **3. Mechanical requirements (机械条件)**

3.1 Power supply dimension constraints (电源外形尺寸)

3.2 Power supply connectors (电源接口)

## **4. Electrical requirements (电气特性)**

4.1 Input voltage DC (直流输入)

4.2 Input current (输入电流)

4.3 Output voltages and loads (输出电压与负载)

4.4 Cross regulation (交叉调整率)

4.5 Protection (保护)

4.6 Efficiency (效率)

4.7 Turn on delay time (开机延迟时间)

4.8 Mean Time Between Failures (MTBF) (平均无故障时间)

## **5. Environmental requirements (环境要求)**

5.1 Operating Temperature (环境温度)

5.2 Humidity (Non-condensing) (湿度)

5.3 Altitude (海拔高度)

## **6. Outline dimensions (结构图)**

## 1.Scope(范围)

The AY21LD-06S02 comprises a 15Watts six outputs, DC-DC power supply for light emitting diode TV panels.

## 2. Feature(特性)

All products including samples delivered will meet all the requirements as outlined in the document. The basic requirements of the design features are listed below:

- \* Output Voltages: +42Va—f
- \* High efficiency - to reduce temperature rise, The efficiency is greater than 86%.

## 3. Mechanical requirements(机械条件)

### 3.1 Power supply dimension constraints(电源外形尺寸)

120.0(L)\*30.0(W)\*9.0(H) mm

### 3.2 Power supply connectors(电源接口)

#### 3.2.1 Pin assignment of connector on power input CN2

Pin number	Signal
1	VCC (DC +12V)
2	VCC (DC +12V)
3	ON/OFF
4	ADJ
5	GND
6	GND

Note: 1 ON/OFF voltage, on is 2.5V, off is 0.8V。

2 ADJ voltage is 0~3.3V。0V is minimum output, 3.3V is maximum output。

#### 3.2.2 Pin assignment of connector on power output CN1 CN2

Pin number	Output
1	LED -1
2	LED -1
3	LED -2
4	+42V(for LED)

管制文件	禁止外洩	管制文件	禁止外洩
5	+42V(for LED)		
6	+42V(for LED)		
7	+42V(for LED)		
8	LED -2		
9	LED -3		
10	LED -3		

## 4. Electrical requirements(电气特性)

### 4.1 Input voltage DC(直流输入)

Minimum	Nominal	Rating	Maximum	Unit
<b>11.4</b>	<b>12</b>	<b>11.4~12.6</b>	<b>12.6</b>	Vdc

### 4.2 Input current(输入电流)

Input	Current(Max)
12Vdc	1.1A

### 4.3 Output voltages and loads(输出电压与负载)

Measured at the load end of connected cables.

Table.1 SMPS load limits

Signal name	Current (mA)		
	Max	Typ	Min
+42Va	70	60	50
+42Vb	70	60	50
+42Vc	70	60	50
+42Vd	70	60	50
+42Ve	70	60	50
+42Vf	70	60	50

Note : 1 The output voltage shall remain within the following the output regulation under min/max load.

### 4.4 Cross regulation(交叉调整率)

Signal name	Voltage (Volts)			Current (mA)		
	Min	Typ	Max	Max	Typ	Min

管制文件	禁止外洩		管制文件	禁止外洩	
+42Va	36	42	43	70	60 50
+42Vb	36	42	43	70	60 50
+42Vc	36	42	43	70	60 50
+42Vd	36	42	43	70	60 50
+42Ve	36	42	43	70	60 50
+42Vf	36	42	43	70	60 50

## 4.5 Protection (保护)

### 4.5.1 Output over current protection (输出过流保护)

The output have the over current protection. When the output load increase. The power supply will protection. The will be return to normal state by DC input reset.

## 4.6 Efficiency (效率)

86% min. It will be measured at the maximum load and Typical line (12Vdc)

## 4.7 Turn on delay time (开机延迟时间)

The turn on delay form application of DC input power to the establishment of rated DC power voltage should not exceed 30mS under at 12Vdc full load.

## 4.8 Mean time between failures (MTBF) (平均无故障时间)

50,000 hrs at 25 degrees centigrade when calculated using MIL-HDBK-217F. The vendor can use agreed upon F.I.T. (failure - in - time) number in place of MTBF.

## 5. Environmental requirement (工作环境)

### 5.1 Temperature (环境温度)

Operating: 0°C to +50°C (non-condensing)

Store: -20°C to +70°C.

### 5.2 Humidity (环境湿度)

Operating: 10% to 90% (non-condensing)

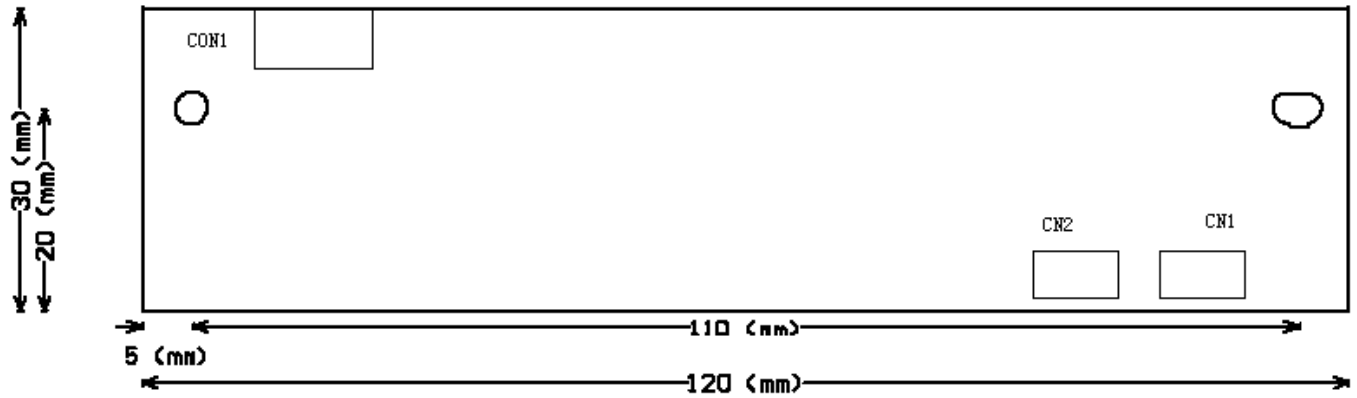
Store: 5% to 95%

### 5.3 Altitude (海拔高度)

Operating: to 10,000 ft.

Store: to 20,000ft.

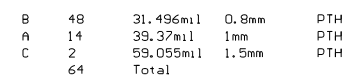
## 6. Outline dimensions(unit: mm)(结构图)

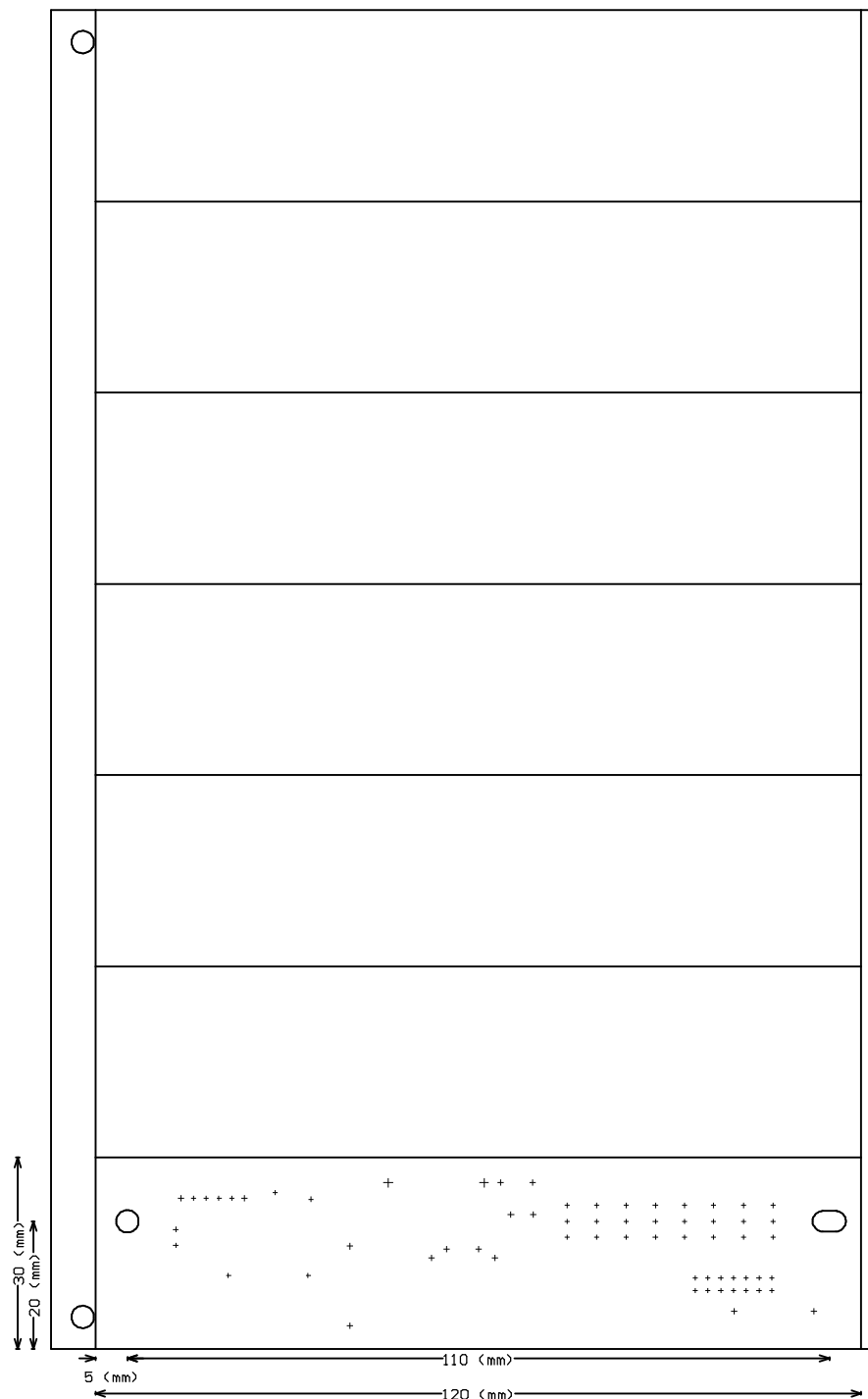


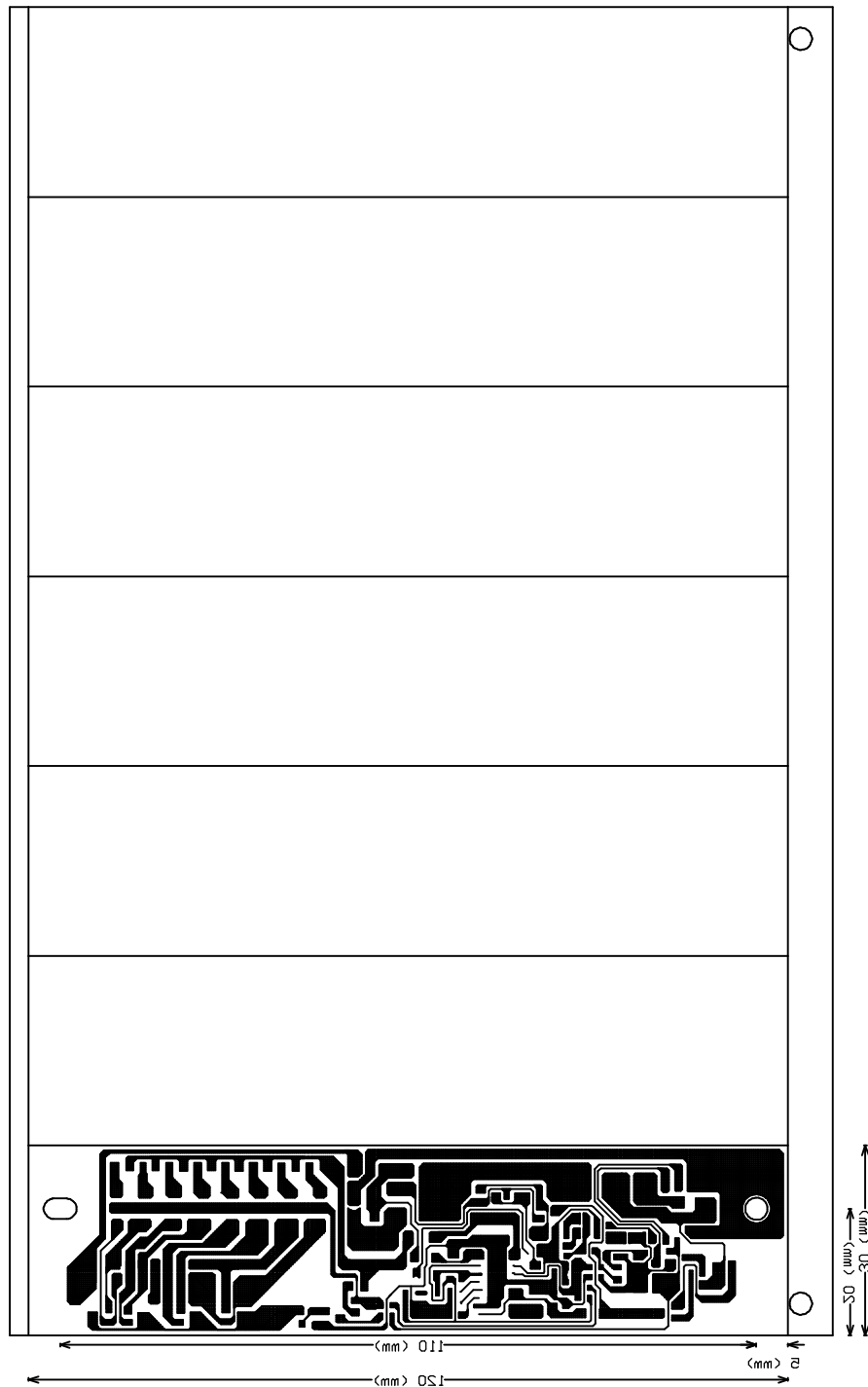
The sample height not include the components pin and PCB

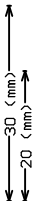


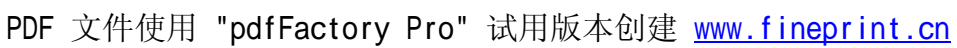


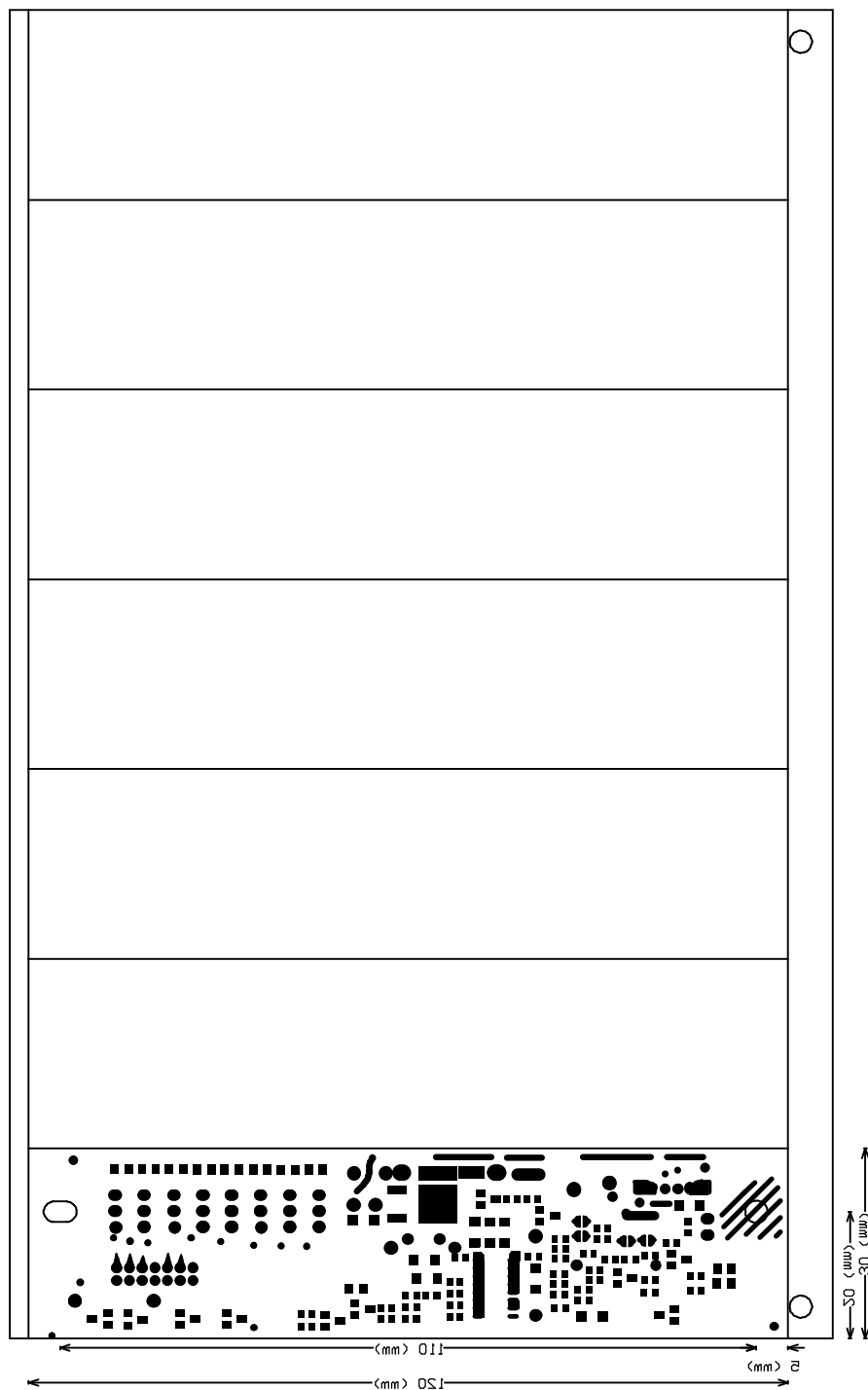














东莞奥源电子科技有限公司  
DongGuan AoYuan Electronics Technology Co.,Ltd

MODEL: AY21LD-06S02

object/part No.	manufacturer/ trademark	type/model	technical data	standard	mark(s) of conformity <sup>1)</sup>
PCB (电源板)	Kingboard Laminates (Macao Commercial Offshore) Ltd	KB-5150	V-0, 130°C	UL 796 UL 94 EN60065	ULE123995 VDE005722
PCB (电源板) (Alternative)	Shandong Jinbao Electronics Co., Ltd	ZD-95(G)F	V-0, 130°C	UL 796 UL 94	ULE141940
PCB (输出插座板)	Kingboard Laminates (Macao Commercial Offshore) Ltd	KB-5150	V-0, 130°C	UL 796 UL 94 EN60065	ULE123995 VDE005722
PCB (输出插座板) (Alternative)	Shandong Jinbao Electronics Co., Ltd	ZD-95(G)F	V-0, 130°C	UL 796 UL 94	ULE141940
Fusing Resistors (F1)	LITTELFUSE INC	466	3A/32V	UL 248	ULE10480
Fusing Resistors (F1) (Alternative)	AEM INC	F1206HI	3A/32V	UL 248	ULE232989