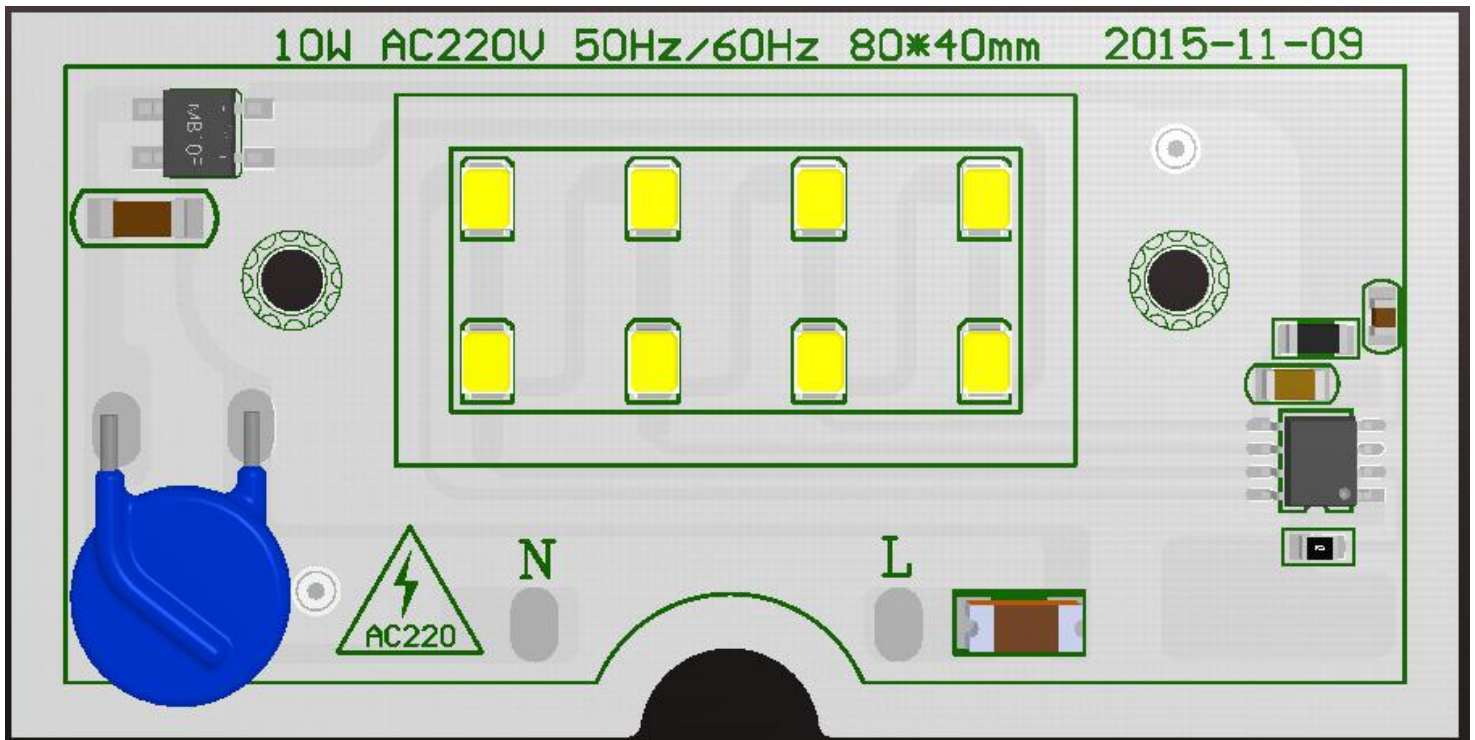


High Voltage High Brightness High Power IC 10W Super Thin AC Linear LED Light Driver ODM Solutions

Part Number : T2A010-1



T2A010-1 LED Driver Advantage 优势

- 超强稳定性,长寿命 Excellent stability and long life
- 高 PF 值>0.98,低 THD<20% , High PF value >0.98, Low THD<20%
- 全贴片方案,体积小 Fully SMT project , small size
- 无 EMI 问题 No emission of harmful short wavelength
- 适用于 LED 投光灯,泛光灯等, Ideal for LED spot lighting& floor lighting
- 整灯应用支持,CE ,ROHS 等认证 Comply with CE, ROHS etc available if assembled to be end product
- 高效率>90% High efficiency>90%
- 过温度保护 Over temperature protection (120°)

产品描述 Product Description

- 高压线性恒流驱动, AC 直接输入设计, 无需 AC-DC 变压器, 灯具设计更灵活方便 High voltage linear constant current LED driver, AC input directly design without AC-DC transformer , LED light design become more flexible and convenient
- 无需电解电容, 超稳定, 使用寿命媲美 LED 灯珠寿命 No need e-cap required , very stable, life time is very long as LED beads.
- 模组具有高功率因素, 实际应用当中做到真正意义上的节能省电
- 产品适用于 LED 投光灯, 泛光灯等 With high power , energy saving function performed well in actual application,it can be used for LED spot lighting, floor lighting.

极限参数 Absolute Maximum Rating

若无特殊说明, 环境温度为 25°C

Ambient temperature is 25°C if there are no special instructions

参数 Parameters	符号 Symbol	最大值 Max value
输入电压 Input voltage	V	260V
输入电流 (单颗 IC) Input current (single IC)	I	HF3028---90mA
		CJ3030F-100mA
工作温度 Work temperature	TOPT	-60°C~85°C
储温范围 Storage temperature	TSTG	-40°C~100°C
ESD 耐压 ESD	VESD	不垫绝缘导热胶垫 without thermal pads--2KV
		垫有绝缘导热胶垫 with thermal pads--10KV



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主要光电参数 Main Electro-Optical Characteristics(T=25°C)

输入电压 Input voltage	AC220V-240V
输入电流 Input current (AC230V)	mA
电源频率 Frequency range	50HZ-60HZ
总谐波失真 THD	≤20%
功率因素 Power factor(PF)	>0.98
系统总功耗 System consumption(AC230V)	50W±5%
LED 发光效率 LED luminous efficiency (AC230V)	≥100LM/W
LED 光通量 LED luminous flux (AC230V)	≥5000LM
色温 CCT	6000K±300K
显色指数 Ra	>80
浪涌电压 (MAX) (差模测试&L/N) Surge	4000V
*使用寿命 Life Time	≥50,000H
电源连接线 Connect wire	L(LIVE) N(NULL)
产品净重(G.W.)	g±2g
PCB 尺寸 (mm)	80*40mm

Notes for Table

*The above parameters based on the current test conditions we have, after be applied with a suitable radiator, we suggest that the peak temperature of the module can't exceed 75°C

*注>以上光电参数为我司现有条件下的测试数据,在装上合适散热体后, 建议控制光电模组最高点温度于 75 摄氏度。

1.The above parameters are the stable value after 5 minutes tested with a simulate radiator, different radiator will have a small difference.

以上参数加上模拟散热体点亮 5 分钟后的稳定值,在不同散热体下,数值将会略有偏差

2 Φv is the total luminous flux output measured with an integrated sphere.

总光通量在积分球内测量。

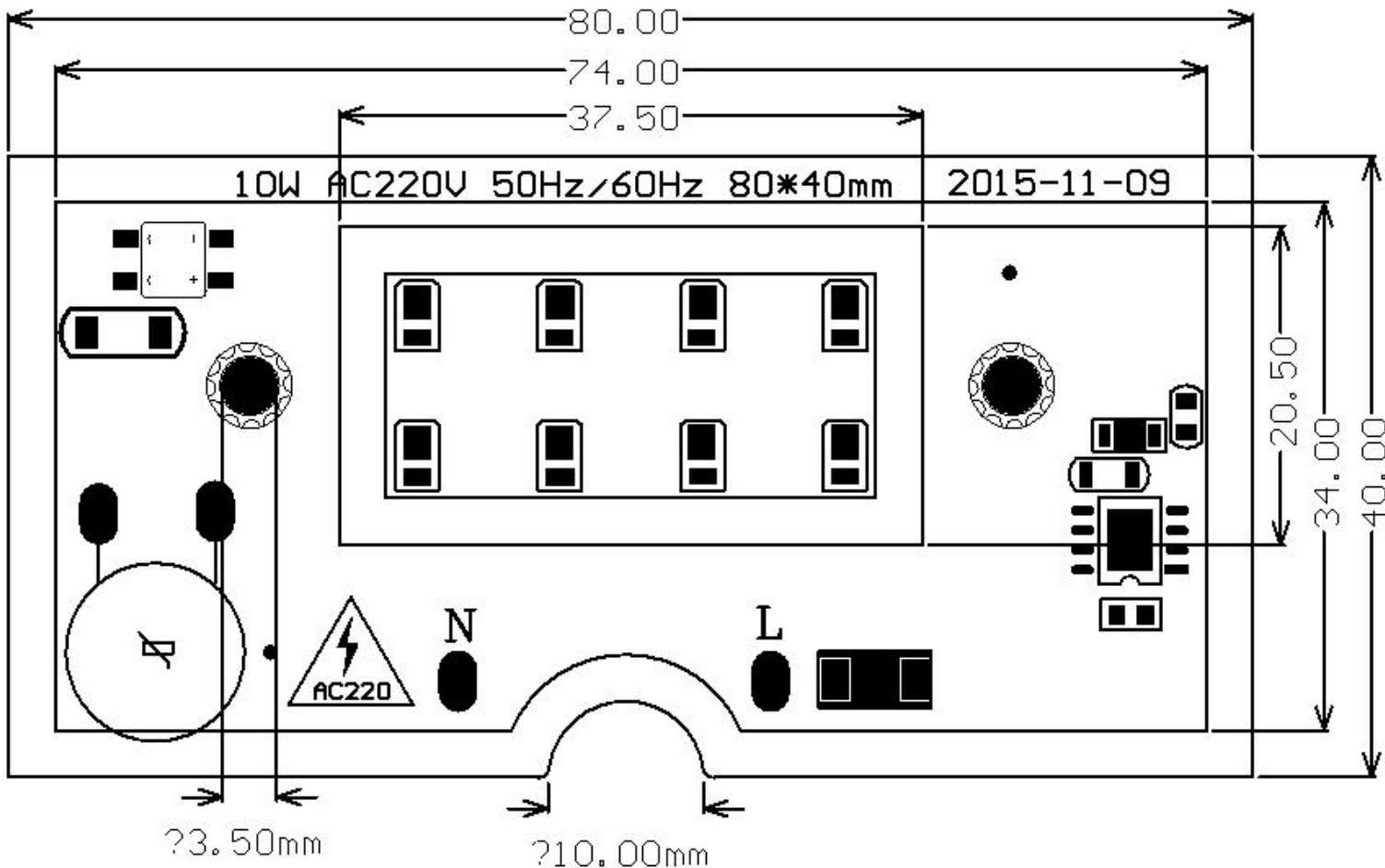
3. Operating Voltage can't exceed the maximum voltage in long time which customers used.

客户使用的最大电压不宜长时间超过最大工作电压

元器件列表 Components List

COMPONENTS LIST			
Part 元器件名称	Specification 说明	Quantity 数量	Reference 标识
Resister	Aolittel R0805 R ±1%	4	R1
Resister	Aolittel R1206	4	R8-R11
Fuse	Aolittel-SET1500(5A/250V)	1	F1
Safety capacitor	C1808	1	C1
capacitor	C1206	1	R2
LED	HL 2835 36V 6000K	8	D1-D8
Bridge diode	MB10F	1	BD1
MOV	Aolittel 10D431K 275Vac	1	VR1
IC	CJ3030F	1	U1
PCB(mm)	L=80 W=40 T=1.6 1layer/Cu 1oz/White PSR		-

产品尺寸图(单位: 毫米) PCB SIZE(Unit:mm)



注意事项 Caution

1. Cautions for use 使用说明

■ Please note, products run off of high run off of high voltage, therefore caution should be taken when working near products.

请注意，由于该产品接高压，因此在该产品安装调试时请务必注意安全。

■ DO NOT touch any of the circuit board, components or terminals with body or metal while circuit is active

当电源工作时，不要触碰模组任何地方，如 PCB 板，器件等。

■ Long time exposure to sunlight or UV can cause the lens to discolor.

长时间暴露在太阳或者 UV 底下，会使胶发生变色。

■ Please do not use adhesives to attach the LED that outgas organic vapor.

请不要用含有有机气体或者粘接剂粘接器件。

■ Please do not use together with the materials containing Sulfur.

请不要与含硫元素物质一起使用。

■ Please do not assemble in conditions of high moisture and/or oxidizing gas such as Cl, H₂S, NH₃, SO₂, NOX, etc.

请不要在高湿或者强氧化气体，如 Cl, H₂S, NH₃, SO₂, NOX 的环境下使用。

■ Please be cautious when soldering to board so as not to create a short between different trace pat-terns.

请在焊接过程中注意不要使其短路。

2. Handing of silicone resin for LEDs 模组三防胶操作事项

■ AC LED module series is encapsulated with silicone resin for high optical efficiency.

AC LED 模组系列产品用硅树脂封装以达到良好的出光效果。

■ Please do not touch the silicone resin area with sharp objects such as pinsetter (tweezers).

不要用尖物（如镊子）去碰硅树脂区域。

■ Finger prints on silicone resin area may affect the performance.

印在硅树脂上的指纹可能影响性能。

■ Please store LEDs in covered containers to prevent dust accumulation as this may affect perform-ance.

请储存在有盖的容器内，以防止 LED 封尘，影响性能。

■ Excessive force more than 3000gf to the silicone lens can result in fatal or permanent damage with LEDs.

大于等于 3000gf 的力会导致胶体产生永久性失效。

■ Please do not cover the silicone resin area with any other resins such as epoxy, urethane, etc

请不要用其它树脂材料，如环氧树脂、聚氨酯等覆盖在硅树脂区域。



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3. Handling with regards to static electricity 静电操作

■ The product is equipped with an integrated circuit (IC) which can be damaged when exposed to static electricity. Please handle using equipment that prevents static electricity. Do not touch unless ESD protection is used.

该光引擎产品使用 IC，此 IC 能被静电击穿，请用防静电的工具来操作使用

4. Storage 存储

■ Do not impact or place pressure on this product because even a small amount of pressure can damage the product. The product should also not be placed in high temperatures, high humidity or direct sunlight since the device is sensitive to these conditions.

不要将产品挤压或在有压力的环境下，因为该产品这样有可能受损，也不要储存在高温，高湿或者太阳直射的环境下。

■ When storing devices for a long period of time before usage, please following these guidelines:

■The devices should be stored in the anti-static bag.

■ If the anti-static bag has been opened, re-seal preventing air and moisture from being present in the bag.

如果长时间不用，请按以下指引：

该产品储存在防静电袋内。

如果防静电袋被打开，需要重新密封，请做真空防潮处理。

5. Guidelines for working 操作指南

■ Use only properly rated test equipment and tools for the rated voltage and current of the product being tested.

使用额定测试装置或者工具来测量产品的电压与电流。

■ It is strongly suggested to wear rubber insulated gloves and rubber bottom shoes to prevent electric-shock.

强烈建议使用橡胶手套与穿橡胶底鞋子防止静电。

■ Do not wear any conductive items (such as jewelry) which could accidentally contact electric circuit.

不要穿戴导电物件（如珠宝首饰），因为可能碰到电路。

■ Hot-plug test is not recommended.

接电状态不建议测试。

■ Faults, lightning, or switching transients can cause voltage surges in excess of the normal ratings.

故障，闪电或者开关短路可能引起电压瞬态升高，超过额定值。

■ Internal component failure can cause excessive voltages.

内部元器件失效有可能导致电压超高。

■Products for out door application ,strongly recommended to add a surge protection circuit or lightning arrester.

户外照明应用产品，我司强烈建议外加一个专业抗浪涌电路或防雷器

■PCB board need be fixed by plastic screw or plastic clips, and there must place A heat conductive insulation adhesive between the PCB board and radiator



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需用塑料螺丝或塑料卡扣固定基板，并在铝基板与散热体之间垫上绝缘导热双面胶，做好绝缘。

6. withstanding high voltage testing 耐高压测试事项

■When the module assembling with housings to be finished lamp, if withstanding voltage test needed , please be sure to add a piece of insulated thermal-conduct pad between the PCB board and housing ,we strongly recommend no further test again and return to be a normal products after this withstanding high voltage testing., because more or less damage to LEDs or other components . Besides the purpose of withstanding voltage test just for proving whether the product is safe or not , it don't connect with the functionality of product

本模组在打高压测试时前，请务必在基板和外壳之间加上绝缘导热垫片，装上外壳后构成成品灯具再进行打高压测试，并且打完高压后的抽检产品本司不建议再出货；因为打完高压后，或多或少会对元器件造成伤害，影响到产品寿命；打高压只是为了检验评估产品是否安全，与产品功能无直接关系。