RoHS

Specification

Client Name：
客户名称：_____

Client P/N：
客户品号：_____

Product P/N：
产品型号：HL-LE001H426W-M

Sending Date:
送样日期：_____

Client approval 客户审核			Hongli approval 鸿利光电审核		
Approval 核准	Audit 确认	Confirmation 制作	Approval 核准	Audit 确认	Confirmation 制作
☐ Qualified 接受 ☐ Disqualified 不接受			DATE: 日期：		

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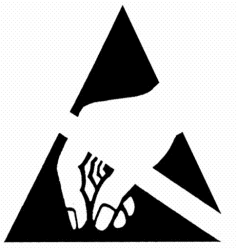
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1.Part code 产品型号命名原则

LE 001 H426 W –X B1CX – (Ra2) –M
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Product line	产品系列代码
② Product code base plate	产品基板代码
③ Chip code	芯片代码
④ Emitting light colors	发光颜色代码
⑤ Power	功率代码
⑥ Serial/Parallel connection	电路组合代码
⑦ CRI	显色指数代码
⑧ Substrate material	基板材质代码





ATTENTION注意
OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES
请勿裸手接触器件

2.Features 特点

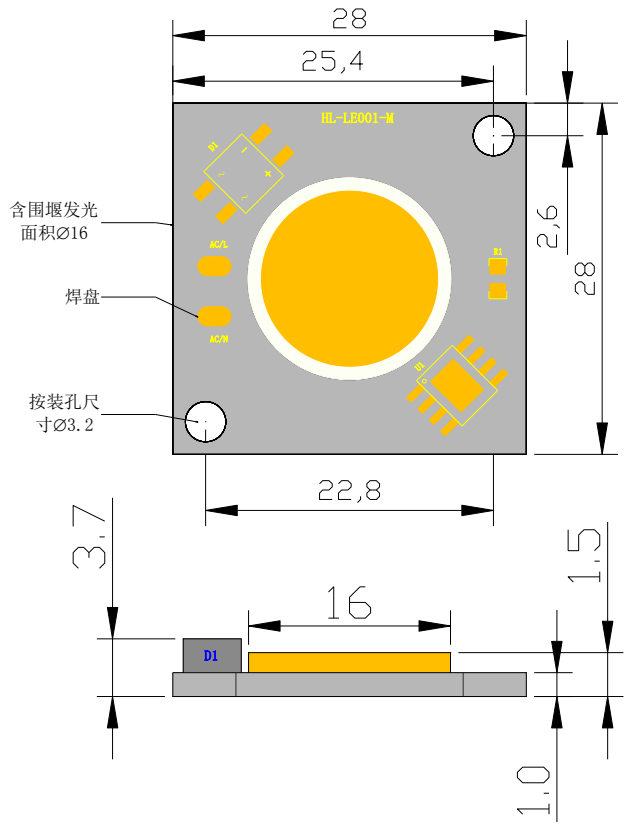
- Dimension 28.0mm×28.0mm×3.7mm
  尺寸 28.0mm×28.0mm×3.7mm
- Connects directly to AC Power
- PF>0.98 THD<16%
- CRI: Ra>80 显色指数:80
- Wide viewing angle：120° 发光角度：120°
- RoHS compliant （ROHS标准）

3.Applications 应用

- Bulb Light 球泡灯
- Down Light 筒 灯
- Absorb dome Light 吸顶灯

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4.Package Dimensions封装尺寸



Tolerance unless otherwise specified: ±0.3mm.
尺寸公差为±0.3 毫米除非另有说明

5.Performance 性能

(1) Absolute Maximum Ratings

Ta=25℃

Parameter参数		**Symbol符号**	Raged Voltage	**Rating Value值**	**Units单位**
Maximum Voltage 最大电压	LE001H426W-5B1C42-Ra2-M	V_{OPT}	110V	140	V[RMS]
	LE001H426W-10B1C82-Ra2-M		220V	265	
Power Dissipation 耗散功率	LE001H426W-5B1C42-Ra2-M	P_D	110V	5.6	W
	LE001H426W-10B1C82-Ra2-M		220V	12	
Junction Temperature 结温		Tj –LED		120	℃
		Tj-IC		125	℃
Operating Temperature Range 工作温度		Top		-20℃ To +70℃	
Storage Temperature Range 储藏温度		Tstg		-40℃ To +100℃	
Lead Soldering Temperature*引线焊接温度		T_{SOL}		Max. 350℃ for 5sec Max.	
ESD Sensitivity		-		±4,000V HBM	

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(2) Electro-Optical Characteristics at Tc=25℃

光电特性 Tc=25℃

Parameter参数		Symbol符号	Condition 条件		Min.	Typ.	Max.	Unit 单位
Operating Voltage 工作电压	LE001H426W-5B1C42-Ra2-M	V_{OPT}	—		—	110	135	V
	LE001H426W-10B1C82-Ra2-M				—	220	265	
Power Dissipation 功率	LE001H426W-5B1C42-Ra2-M	P_D	V_{OPT}=110V		4.2	5	5.6	W
	LE001H426W-10B1C82-Ra2-M		V_{OPT}=220V		9.5	10	12	
Luminous Flux 光通量	LE001H426W-5B1C42-Ra2-M	Φv	TC=3045K	V_{OPT}=110V	450	510	—	lm
	LE001H426W-10B1C82-Ra2-M			V_{OPT}=220V	880	950	—	
	LE001H426W-5B1C42-Ra2-M		TC=5665K	V_{OPT}=110V	480	530	—	
	LE001H426W-10B1C82-Ra2-M			V_{OPT}=220V	950	1000	—	
CRI 显色指数		Ra	—		80	—	—	—
Power Factor		PF	—		0.98	—	—	—
Thermal Resistance 热阻		R_{j-s}-LED	V_{OPT}=110V		—	3.0	—	℃/W
			V_{OPT}=220V		—	1.8	—	

Notes for Table

1.Color bins are defined at transient operation
该产品通过瞬态点亮测试，分光分色。

2.The tolerance of measurement at our tester is Φv+/-10% and Ra+/-2.
测试仪测量的公差 流明±10% 和显指±2 。

3.Tolerence of ±0.005 on x,y coordinates.
色坐标的测量误差允许在±0.005 。

4. Φv is the total luminous flux output measured with an integrated sphere.
总光通量在积分球内测量。

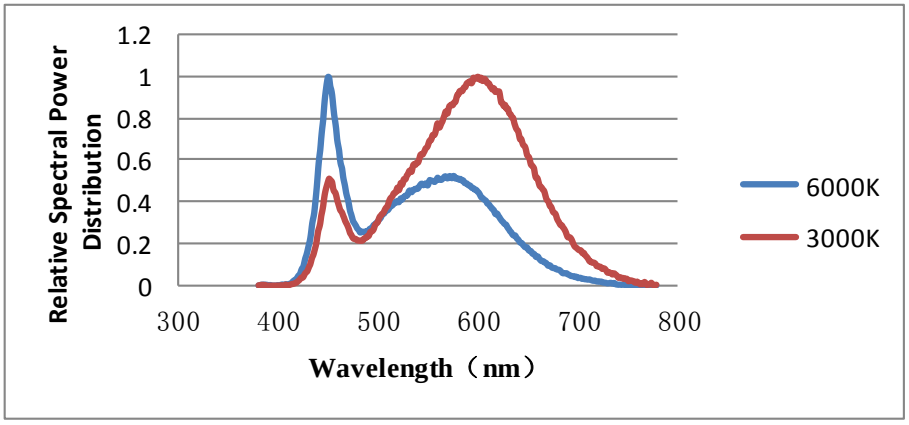
5. Operating Voltage doesn't indicate the maximum voltage which customers use .
客户使用的最大电压不能超过最大工作电压。

6. $Ts=Tj-(R_{j-s} \times P_D)$
It is recommended that the soder pad temperature should be below 70℃.
LED焊盘温度不能超过70℃。

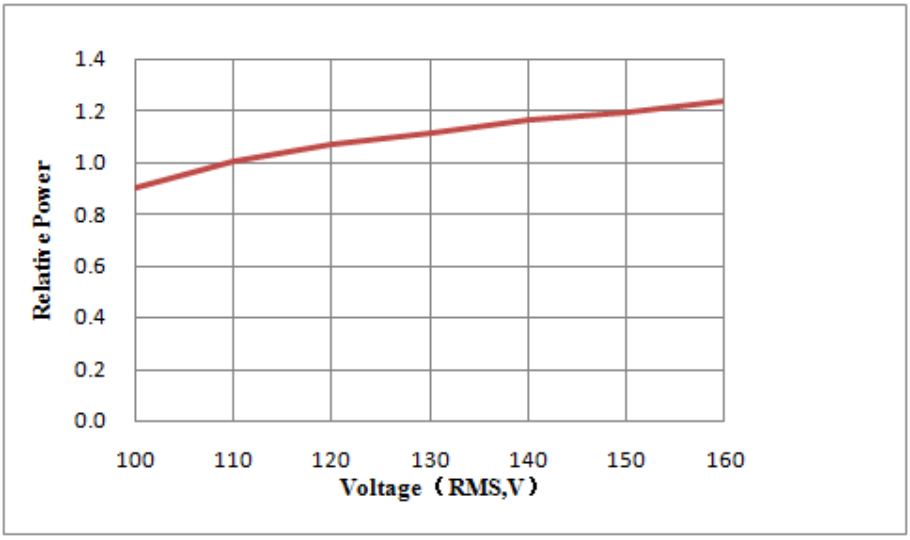
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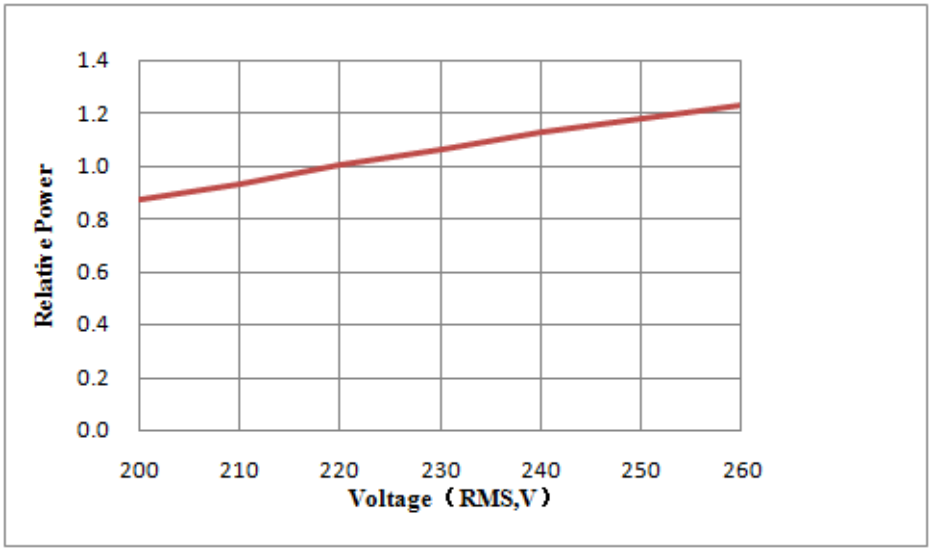
6.Characteristics特性

6.1 Color spectrum



6.2 Relative Power Distribution vs. Voltage at Ta=25℃

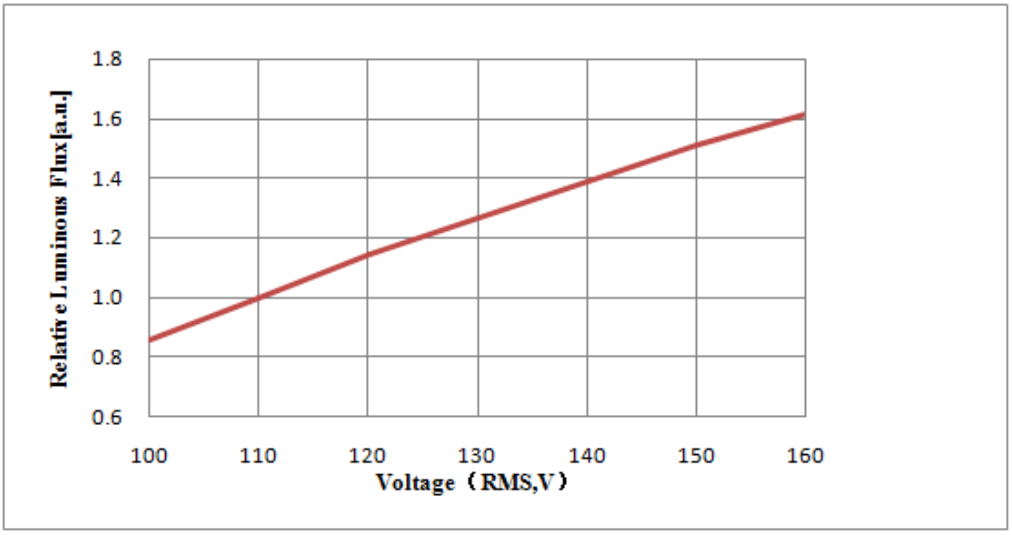


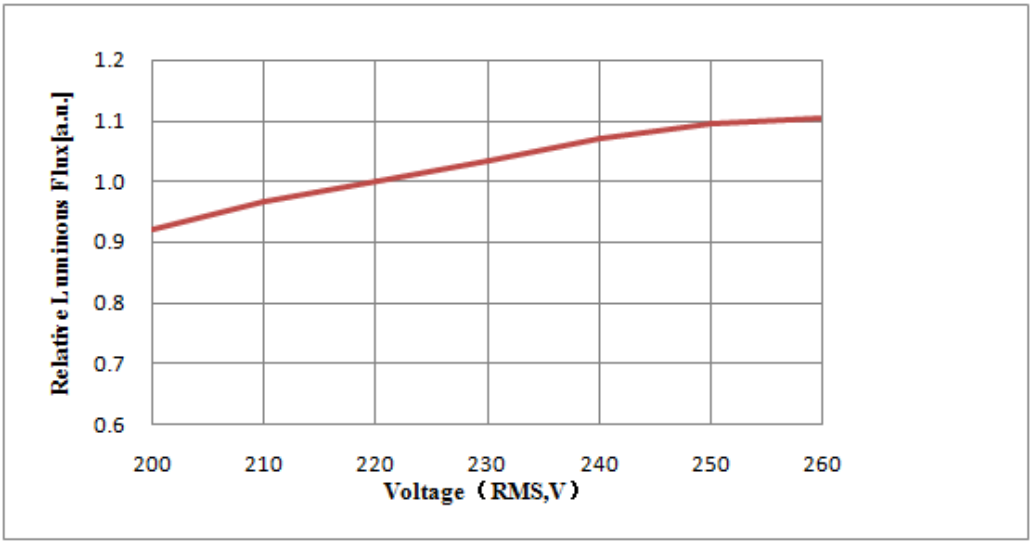


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6.Characteristics特性

6.3 Relative Luminous flux vs. Voltage at Ta=25℃

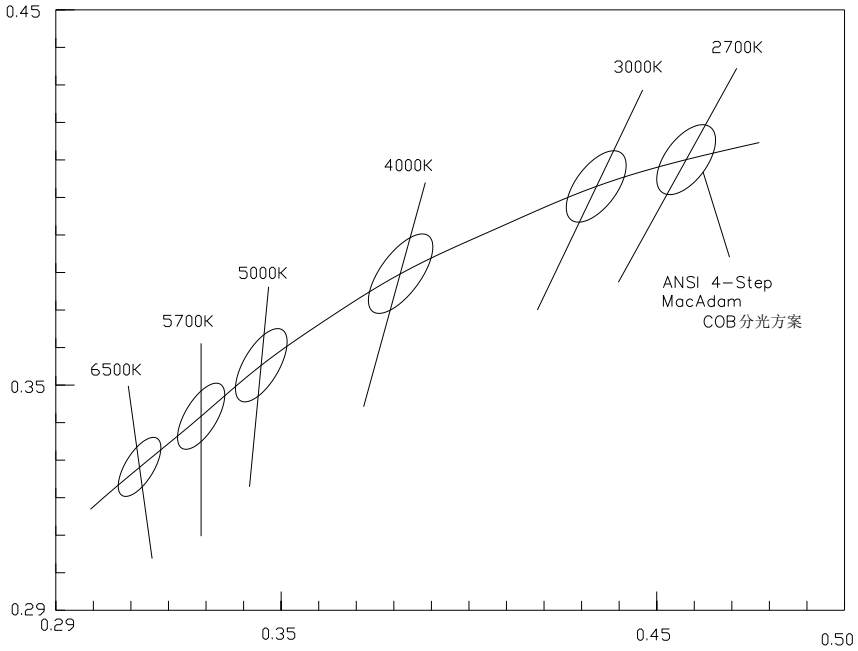




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7.Product bins 产品分级

Chromaticity bins

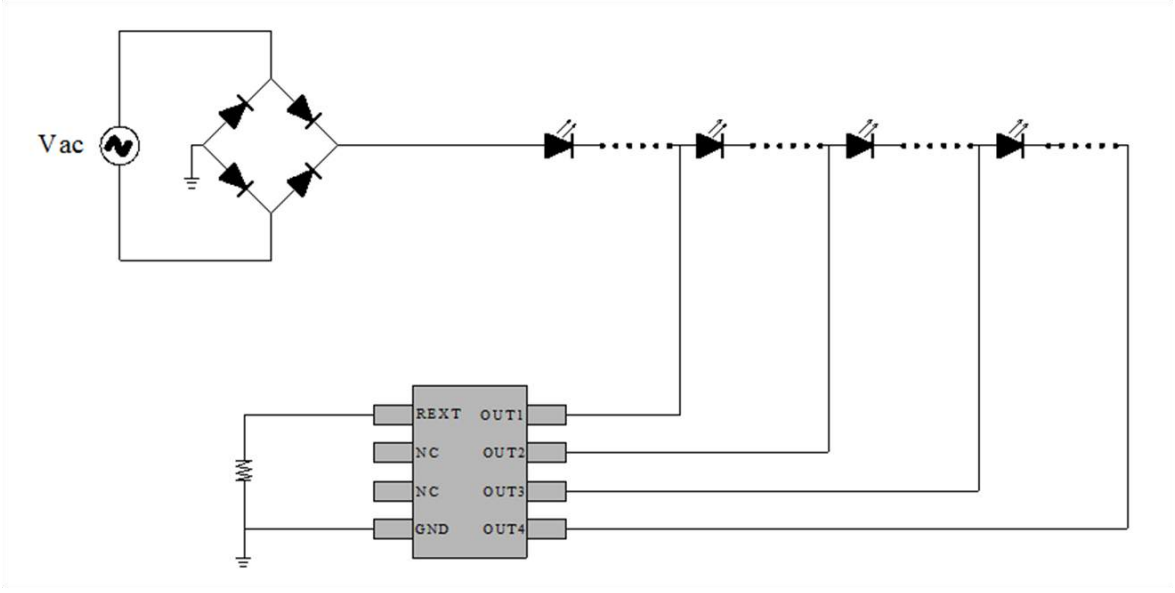


Center TC	2725K	3045K	3985K	5028K	5665K	6530K
X,Y	0.4578,0.4101	0.4338,0.403	0.3818,0.3797	0.3447,0.3553	0.329,0.3417	0.3123,0.3282

Notes ：

1、 The chromaticity center refers to ANSI C78.377-2008
色温分bin参考ANSI C78.377-2008

8.Circuit Drawing 电路图



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10.Packing Specifications 包装规格



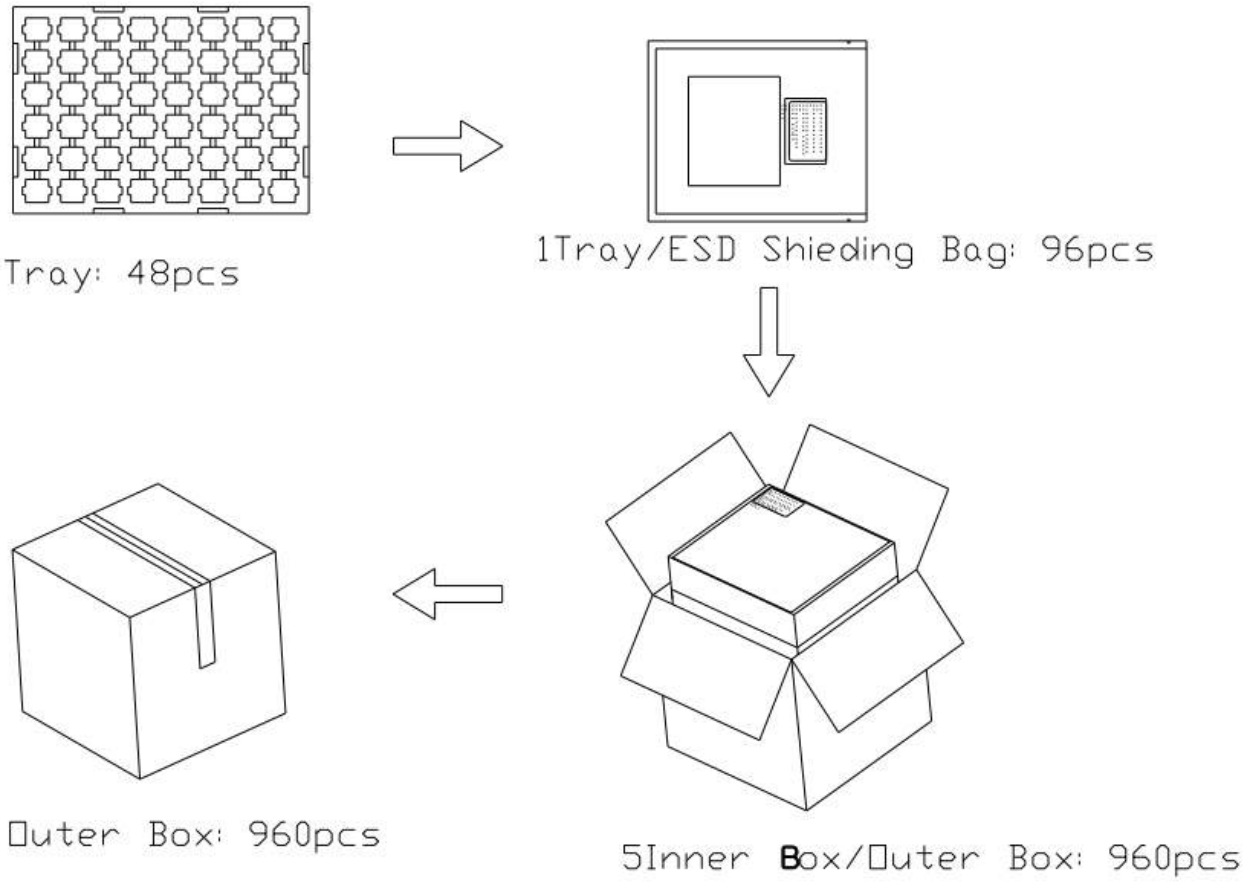
Label on blister packaging吸塑盒标签



Label on box 外箱标签

ΦV: Luminous Flux rank 光通量档次典型值
TC: Color temperature 色温

■ Packing figure 包装图



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Precautions (注意事项)

1. Cautions for use

- 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, H_2S,NH_3,SO_2,NO_X,etc.
  请不要在高湿或者强氧化气体，如Cl, H_2S,NH_3,SO_2,NO_X的环境下使用。
- Please be cautious when soldering to board so as not to create a short between different trace patterns.
  请在焊接过程中注意不要使其短路。
- It‘s recommended to use indoor.
  本产品使用于室内照明。

2. Handing of silicone resin for LEDs

- 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 pincette (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 performance.
  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

■ The product is eguipped 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

■ 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

■ 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 rubberinsulated 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 circuits.
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.

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