HONGLITRONIC
鸿利光电

RoHS

Specification

规 格 书

Customer Name： _____

客户名称：

Customer P/N： _____

客户品号：

Factory P/N： **HL-S-3801H343W-B1C26-S1-HR3**

公司品号：

Sending Date： _____

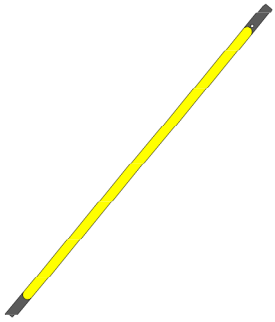
送样日期：

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
			林德顺	工程部	黄雪梅
☐ Qualified 接受		☐ Disqualified 不接受	DATE: 日期：		

Adr：Airport High-tech Industry Base Jingu South Road(XianKe 1st Road Intersection),
Huadu District,Guangzhou,China
地址：中国广州市花都区机场高新科技产业基地金谷南路与先科一路交汇
Tel/电话：020-86733333 Fax/传真：020-86733883 86733938 86733265
Web/网址：www.honglitronic.com

注:1. 此规格书以中英文方式书写, 若有冲突以中文版本为准文本.
2. 此规格书的最终解释权归广州鸿利光电股份有限公司
3. 此规格书的有效期限为两年, 自盖章或签字之日起计算, 期满时双方可以续签协议, 但应采用书面形式

HL-S-3801H343W-B1C26-S1-HR3



Features(特征）

- 360° viewing angle（360° 全角度发光）
- High efficiency and color rendering index（高光效, 高显色指数）
- RoHS compliant (RoHS 认证）
- Package:54pcs/box(每个吸塑盒包装54PCS）

Description（描述）

The White LED which was fabricated using a blue chip and the phosphor

白光LED由蓝光芯片与荧光粉激发而成

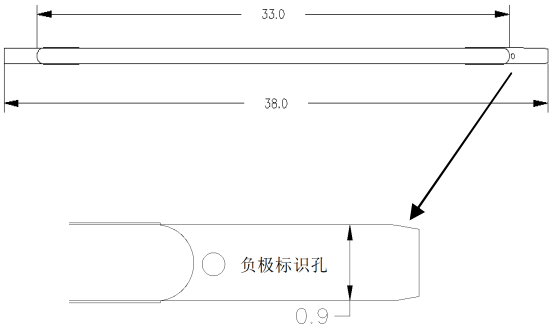
ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

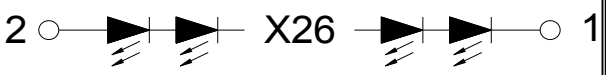
注意：操作时应注意静电敏感释放设备装置

Applications（应用）

- Candle lights(蜡烛灯)
- Bulb Lights（球泡灯）

Package Dimensions（封装尺寸）





Notes:（备注）

1. All dimension units are millimeters.（所有标注尺寸单位为毫米）

2.All dimension tolerance is ±0.15mm unless otherwise noted.（除特别标注外，所有尺寸允许公差±0.15mm ）

HL-S-3801H343W-B1C26-S1-HR3

Selection Guide（选择指南）

Part No. 型号	Chip Materials 芯片材料	Lens Type 胶体类型
HL-S-3801H343W-B1C26-S1-HR3	InGaN	Yellow Diffused

Mass Production list（批量生产目录）

Part No. 型号	CCT（K）Min	CCT（K）Typ	CCT（K）Max	Φ（lm）Min	Φ（lm）Typ	Test Conditions 测试条件
HL-S-3801H343W-B1C26-S1-HR3	2800	3000	3100	105	115	IF=10mA
	2600	2700	2800	100	110	IF=10mA

Electrical / Optical Characteristics at Ta=25°C 电性与光学特性

Parameter（参数）	Symbol（符号）	Min.（最小）	Typ.（平均）	Max.（最大）	Units（单位）	Test Conditions 测试条件
Forward Voltage 正向电压	VF	65	- -	75	V	IF=10mA
Viewing Angle 角度	2θ1/2	- -	360	- -	deg	IF=10mA
Color Rendering Index 显色性指数	Ra	80	- -	- -		IF=10mA

Note:(备注）

1. 2θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
   2θ1/2 是半值角,指光强是光学中心线光强的1/2处到光学中心线的角度
2. The above luminous flux measurement allowance tolerance is ±10%.
   上述发光通量的测试允许公差为±10%
3. The above Color Rendering Index measurement allowance tolerance is ±2
   以上显色性指数的测试允许公差为±2
4. The above forward voltage measurement allowance tolerance is ±1V.
   以上所示电压测量误差±1V
5. The above color coordinates measurement allowance tolerance is ±0.003.
   以上所示坐标测量误差±0.003

HL-S-3801H343W-B1C26-S1-HR3

Absolute Maximum Ratings at Ta=25°C 绝对最大额定值

Parameter（参数）	Symbol（符号）	Rating（值）	Units（单位）
Power Dissipation（功耗）	Pd	0.7	W
Forward Current（正向电流）	IF	10	mA
Peak Forward Current [1]（峰值正向电流）	IFP	15	mA
Electrostatic Discharge (HBM)（静电）	ESD	1000	V
Operating Temperature（操作温度）	Topr	-40 ~ +85	℃
Storage Temperature（保存温度）	Tstg	-40 ~ +100	℃
Junction Temperature结温	Tj	115	℃

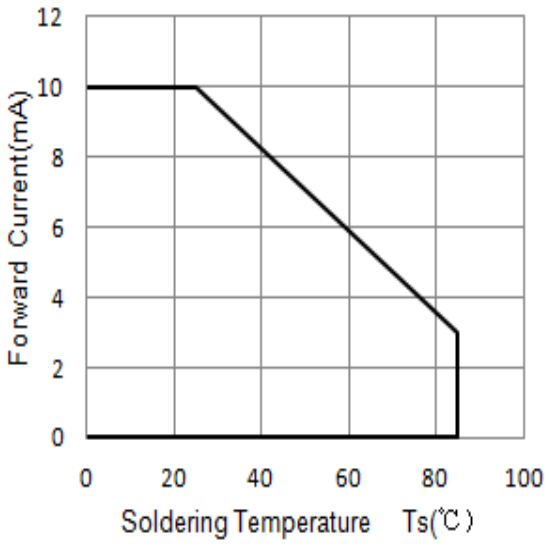
Note:（备注）

1. 1/10 Duty cycle, 0.1ms pulse width.（脉宽0.1ms,周期1/10）

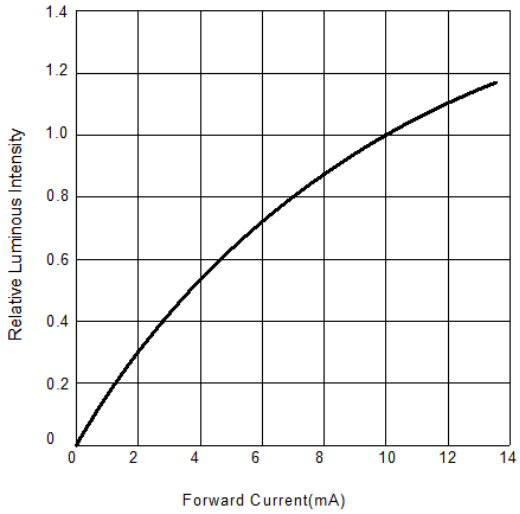
HL-S-3801H343W-B1C26-S1-HR3

Typical optical characteristics curves 典型光学特性曲线

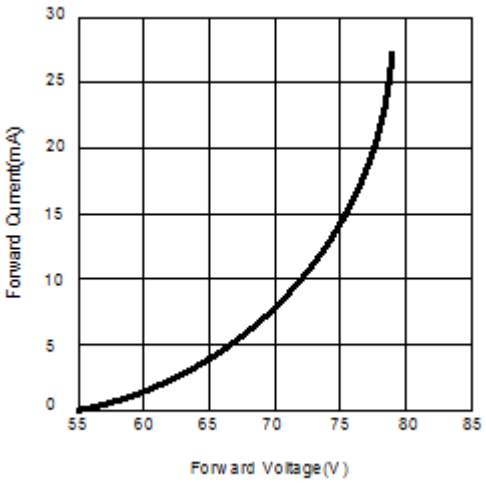
Soldering Temperature vs. Forward Current
焊盘温度与正向电流特性曲线



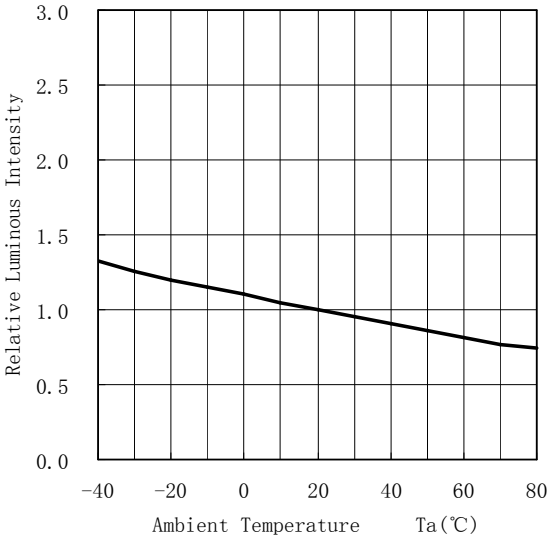
Forward Current VS. Relative Intensity
正向电流与相对光强特性曲线



Forward Voltage VS. Forward Current
正向电压与正向电流特性曲线



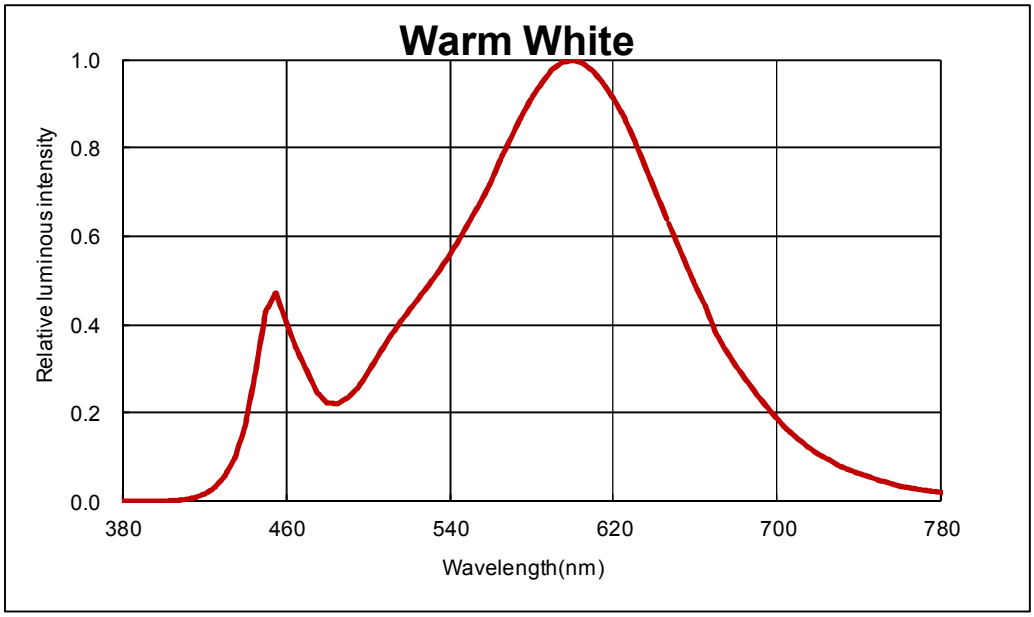
Ambient Temperature VS. Relative Intensity
环境温度与相对光强特性曲线



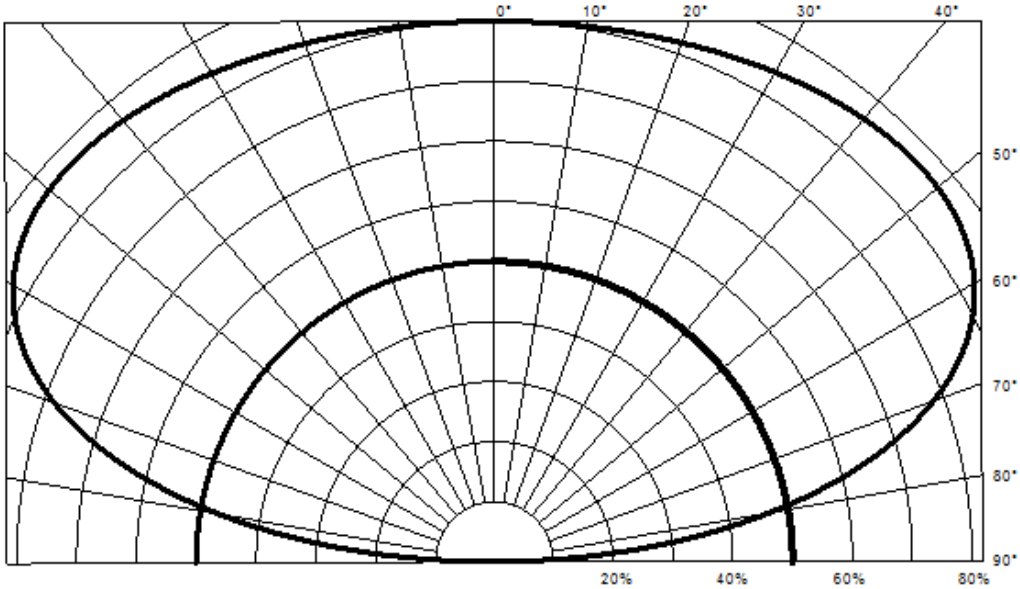
HL-S-3801H343W-B1C26-S1-HR3

Typical optical characteristics curves 典型光学特性曲线

Relative spectral emission 相对光谱分布特性曲线

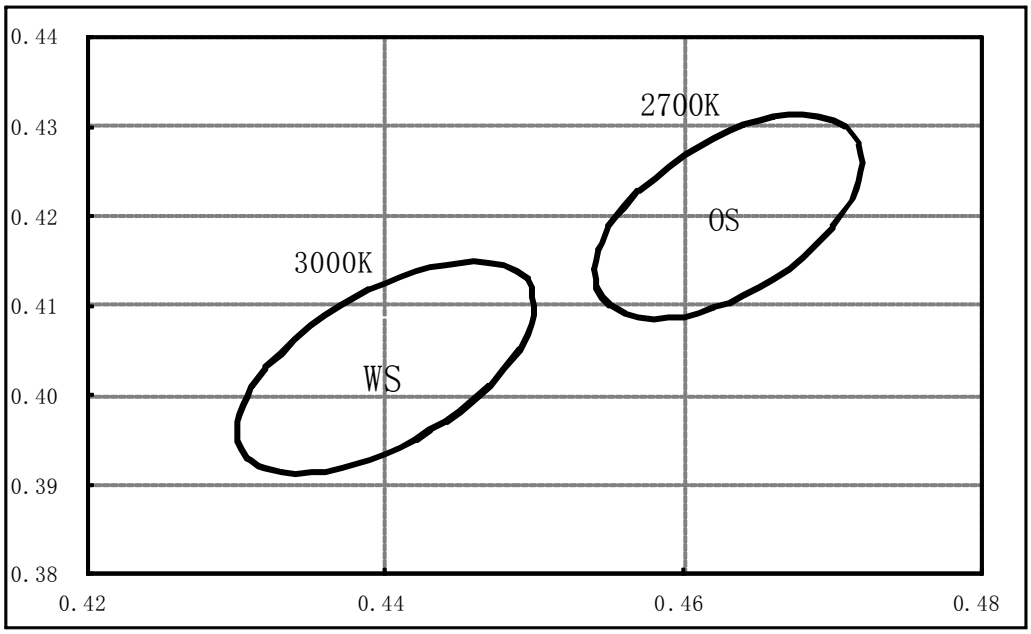


Light angle diagram 发光角度图



HL-S-3801H343W-B1C26-S1-HR3

Bin Range of Chromaticity Coordinate Bin区分类及色坐标范围



CCT 色温	Bin Code Bin代码	CIE_x	CIE_y
3000K	WS 2800-3100K	0.440	0.403
2700K	OS 2600-2800K	0.463	0.420

HL-S-3801H343W-B1C26-S1-HR3

Reliability Test Items And Conditions 信赖性测试项目及条件

Test Items 项目	Ref. Standard 参考标准	Test Condition 测试条件	Time 时间	Quantity 数量	Ac/Re 接收/拒收
Reflow 回流焊	JESD22-B106	Temp:260℃max T=10 sec	3 times.	11Pcs.	0/1
Temperature Cycle 温度循环	JESD22-A104	100℃±5℃ 30 min. ↑↓5 min -40℃±5℃ 30 min.	100 Cycles	11Pcs.	0/1
High Temperature Storage 高温保存	JESD22-A103	Temp:100℃±5℃	1000Hrs.	11Pcs.	0/1
Low Temperature Storage 低温保存	JESD22-A119	Temp:-40℃±5℃	1000Hrs.	11Pcs.	0/1
Life Test 常温通电	JESD22-A108	Ta=25℃±5℃ IF=10mA	1000Hrs.	11Pcs.	0/1

Failure Criteria 失效判定标准

Test Items 项目	Symbol 符号	Test Condition 测试条件	Failure Criteria 判定标准	
			Min. 最小	Max. 最大
Forward Voltage 正向电压	VF	IF=10mA	- -	U.S.L*)x1.1
Luminous Flux 光通量	Im	IF=10mA	L.S.L*)x0.7	- -

U.S.L: Upper Specification Limit 规格上限 L.S.L: Lower Specification Limit 规格下限

*The technical information shown in the data sheets is limited to the typical characteristics and circuit examples of the referenced products. It does not constitute the warranting of industrial property nor the granting of any license.
数据工作表中所示的技术信息仅限于典型特征和电路实例引用的产品.它既不构成工业特性的保证,也不构成任何许可的授权.

HL-S-3801H343W-B1C26-S1-HR3

Soldering Instructions 焊接说明

1.Soldering should not be done more than two times.
焊接不可以做两次以上

2.When soldering , do not put stress on the LEDs during heating
焊接时，不要在材料受热时用力压胶体表面

Soldering iron 烙铁焊接

1.When hand soldering, keep the temperature of iron below less 300℃ less than 3 seconds
当手工焊接时，烙铁的温度必须小于300℃，时间不可超过3秒

Cautions 注意事项

The encapsulated material of the LEDs is silicone. Therefore the LEDs have a soft surface on the top of package. The pressure to the top surface will be influence to the reliability of the LEDs. Precautions should be taken to avoid the strong pressure on the encapsulated part. So when use the picking up nozzle, the pressure on the silicone resin should be proper.
LED封装为硅胶，故LED胶体表面较软，用力按压胶体表面会影响LED可靠性，因此应有预防措施避免在封装的零件上的强大压力，胶体表面的压力应是恰当的。

Handling Precautions 处理防备措施

Compare to epoxy encapsulant that is hard and brittle, silicone is softer and flexible. Although its characteristic significantly reduces thermal stress, it is more prone to damage by external mechanical force . As a result, Special handling precautions must be observed during assembling using silicone encapsulated LED products, Failure to comply might leads to damage and premature failure of the LED.
相对环氧树脂较脆较硬而言，硅胶封装较柔软且有弹性，虽然它的特性大大减少了热应力，但易受机械外力损坏，因此在手工处理方面须要对硅胶封装材料做预防措施，若未按要求操作，可能会导致LED损坏和光衰

1.Handle the component along the side surface by using forceps or appropriate tools; do not directly touch or Handle the silicone lens surface, it may damage the internal circuitry.
通过使用适当的工具从材料侧面夹取，不可直接用手或尖锐金属压胶体表面，它可能会损坏内部电路

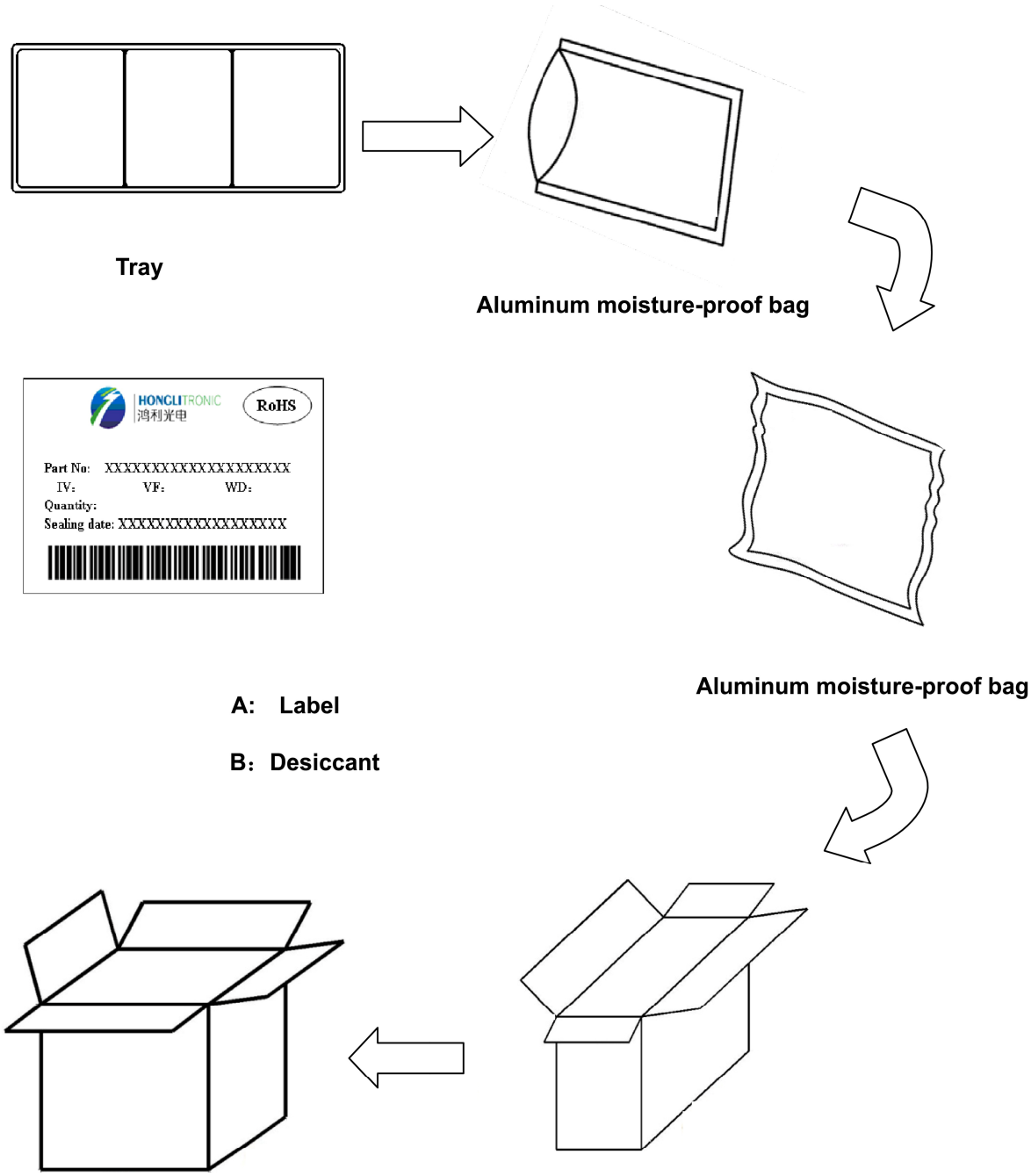
2.Do not stack together assembled PCBs containing LEDs. Impact may scratch the silicone lens or damage the internal circuitry
不可将模组材料堆积在一起，它可能会损坏内部电路

3.Not suitable to operate in acidic environment, PH<7
不可用在PH<7的酸性场所

4.LED operating environment and sulfur element composition cannot be over 100PPM in the LED mating usage material.
LED工作环境及与LED适配的材料中硫元素及化合物成份不可超过100PPM

HL-S-3801H343W-B1C26-S1-HR3

Packaging 包装



A: Label

B: Desiccant