旭宇光电
XUYU Optoelectronics

SPECIFICATION
产品规格书

NO. (编号): XY-SE-PE-0048

Part No.(型号): 9.SL5060RGBW-20W 临时规格书

Description(描述): 5060RGBW 陶瓷

Version NO.(版本): A0

Date(日期):

Customer Approved (客户审核)		Approved (确认)
Xuyu Approved (旭宇审核)	**Approved (确认)**	**Issued (制定)**
张宇	陈冲	袁丽霞
☐Sample（样品）	☑Mass Product（量产供货）	

RoHS compliant

LM-80 LED light source maintenance test ENERGYSTAR

EYE 蓝光危害认证 EN62471/IEC TR 62778

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目录

◆ Features 特性:

*Size(mm)：5.0*6.0*1.15 尺寸（mm）：5.0*6.0*1.15

*Ceramic and sillicone molding package 陶瓷基板 molding 封装

*Viewing Angle ：120° 发光角度： 120°

* High reliability 高可靠性

* RoHS compliant 通过 RoHS 认证

*Suitable for all SMT assembly and solder process 适用所有 SMT 焊接工艺

*Pb-free reflow soldering application 无铅回流焊

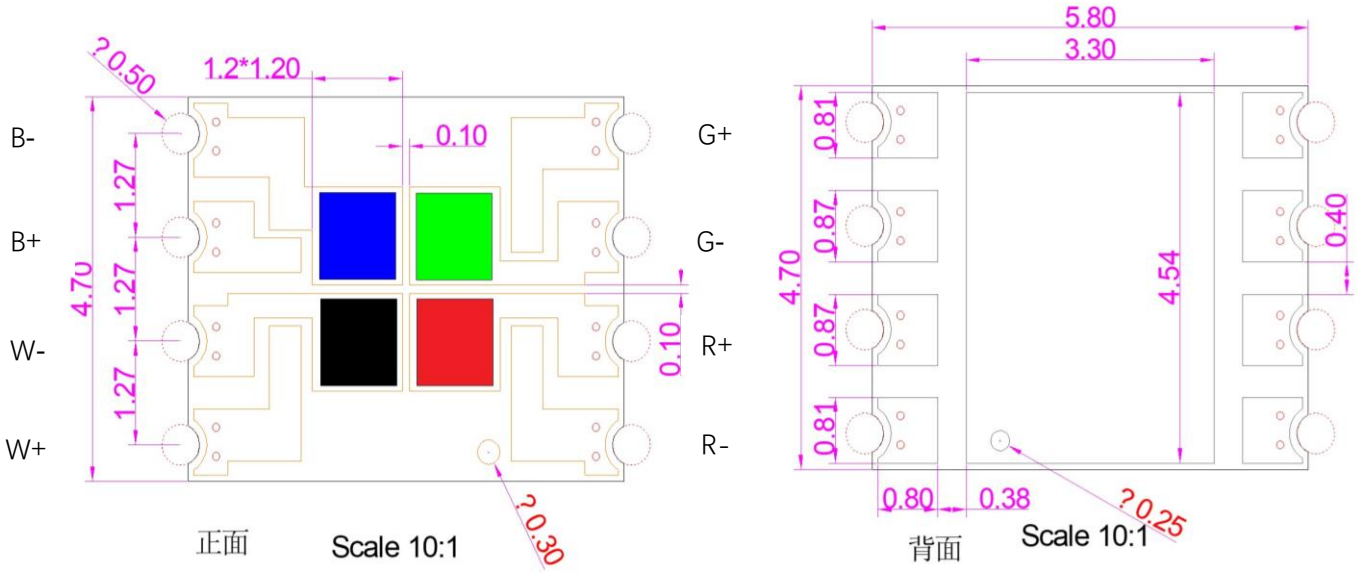
◆ Applications 产品应用:

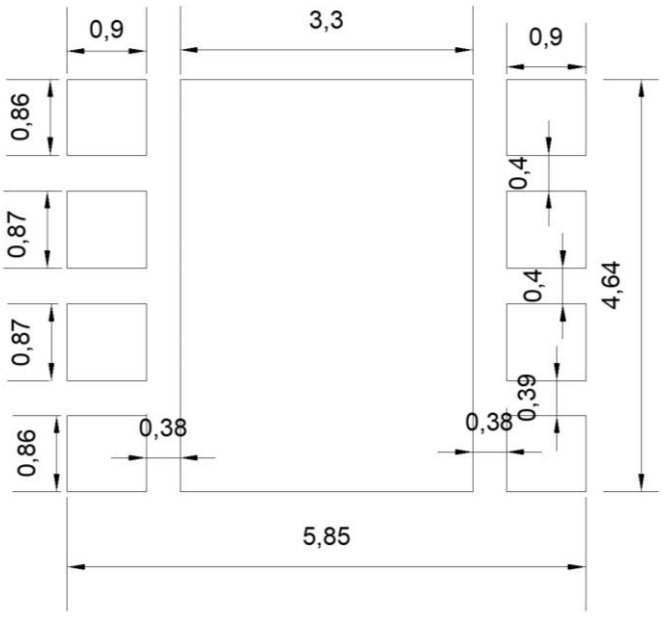
*Entertainment lighting ，娱乐照明

*Ambient lighting，环境照明

*Architectural lighting，建筑照明

◆ Package Dimensions 产品外观尺寸



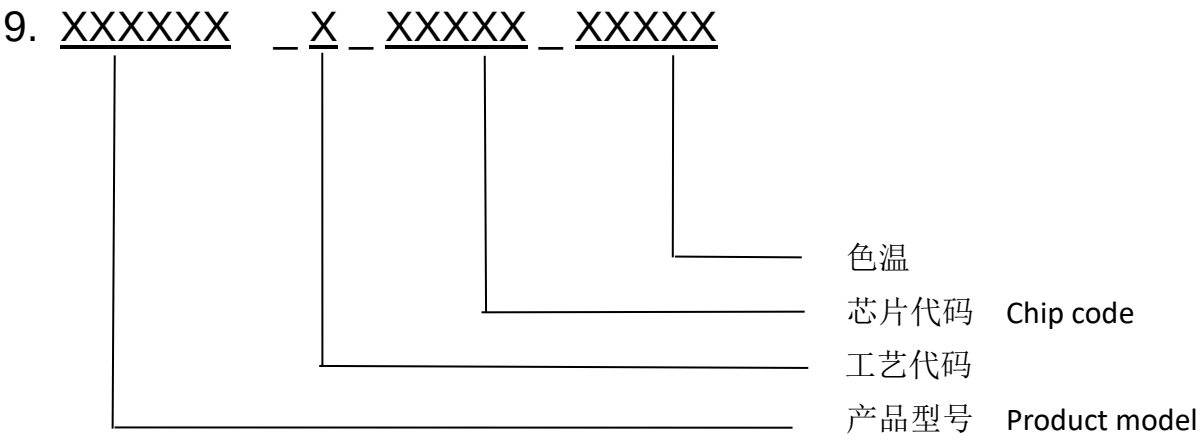


建议焊盘图

Notes:

1. All dimensions are in mm 所有尺寸单位为毫米。
2. Tolerance is ±0.05mm unless otherwise noted. 非特殊标注，公差为±0.05 毫米

◆Product coding rules 产品编码规则



◆ Electro Optical Characteristics (TA=25℃) 光电特性

Parameter	Symbol	Test Condition 测试条件	Color	Min	Typ	Max	Unit
Forward Voltage (正向电压)	V_F	I_F=1.0A	R	2.4	---	3.0	V
			G	2.8	---	3.4	
			B	3.0	---	3.6	
			W	3.0	---	3.6	
Luminous Flux (光通量)	Φ(lm)		R	90	---	120	lm
			G	230	---	270	
			B	40	---	60	
			W	270	---	3330	
Dominant wavelength (主波长)	λ_d		R	620	---	630	nm
			G	520	---	530	
			B	450	---	460	
Color temperature (色温)	CCT		W	---	6500	---	k
Color Rendering Index(显指指数)	CRI		W	---	70	---	--
Thermal resistance 热阻	R_θ		R	---	0.8	---	℃/W
Thermal resistance 热阻	R_θ		G	---	1.6	---	℃/W
Thermal resistance 热阻	R_θ		B	---	1.2	---	℃/W
Thermal resistance 热阻	R_θ		W	---	2.2	---	℃/W

Note: the test tolerance 测试公差

V_F : ±3% λ_d: ±5% Φ : ±10%

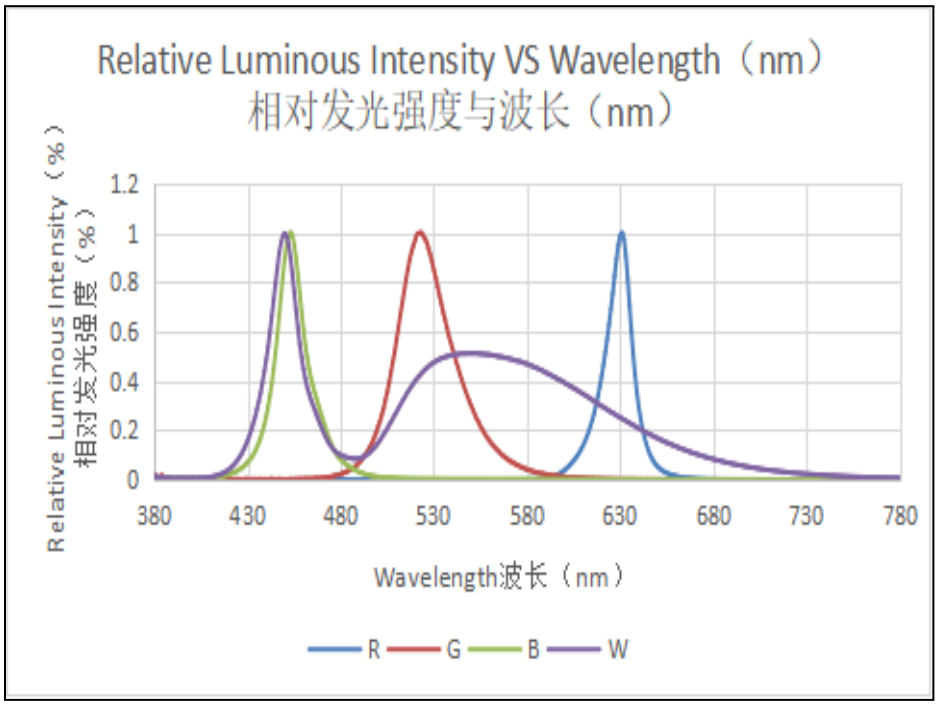
◆ Absolute Maximum Ratings (Ta=25℃) 最大额定值， 单路驱动。

Parameter (参数)	Symbol (符号)	Rating (等级)	Unit (单位)
Forward Current 最大向电流（R）	I_F	1000	mA
Forward Current 最大向电流 (G)	I_F	1500	mA
Forward Current 最大向电流 (B)	I_F	1500	mA
Forward Current 最大向电流 (W)	I_F	2500	mA
Pulse Forward Current 正向脉冲电流	I_{FP}	2500	mA
Operation temperature 操作温度	T_{opr}	-40 to +85	℃
Storage Temperature Range 储存温度范围	T_{stg}	-40 to +85	℃
Junction Temperature 结温 (R)	Tj	125	℃
Junction Temperature 结温 (G)	Tj	150	℃
Junction Temperature 结温 (B)	Tj	150	℃
Junction Temperature 结温 (W)	Tj	150	℃
Soldering Temperature 回流温度	Tsld	260℃ for 10sec	

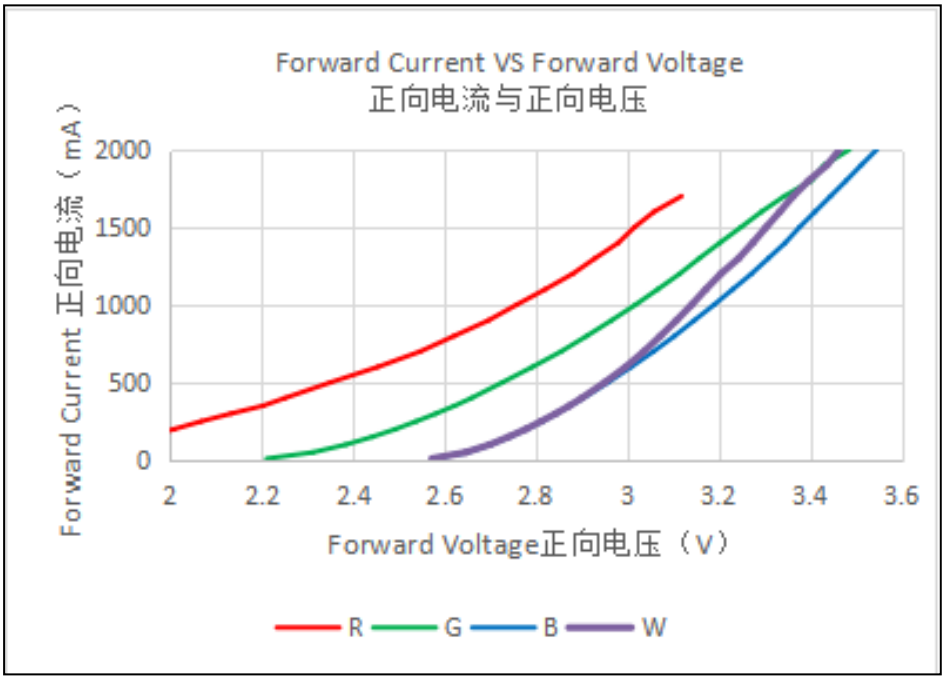
Notes:

1. Frequency 10KHz, duty ratio ≤10% 频率 10KHz ， 占空比≤10%

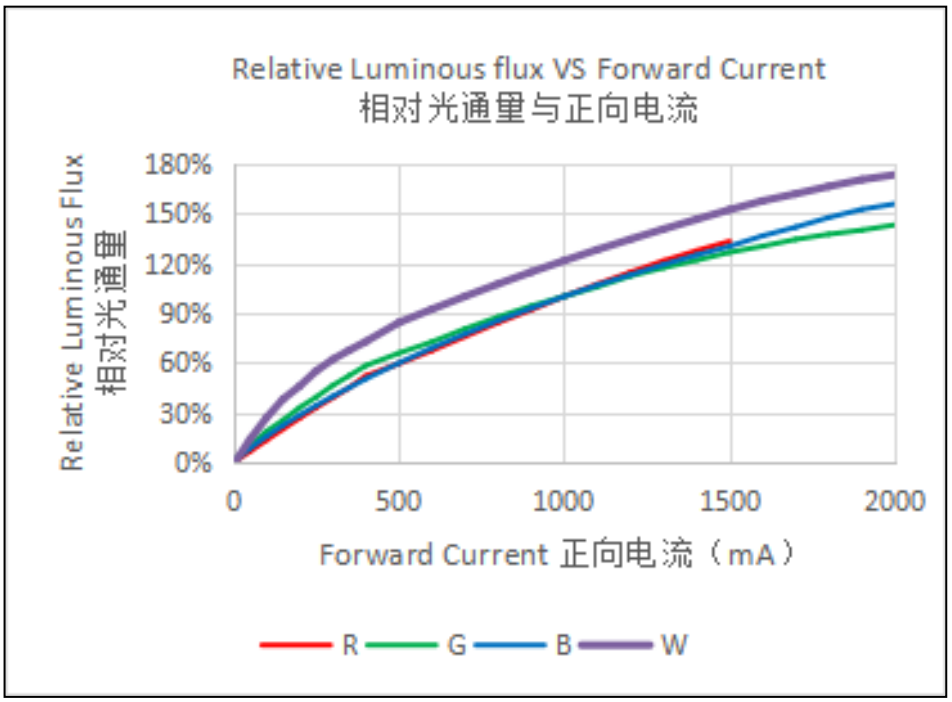
◆ Spectral Distribution 光谱分布特性曲线 RGBW



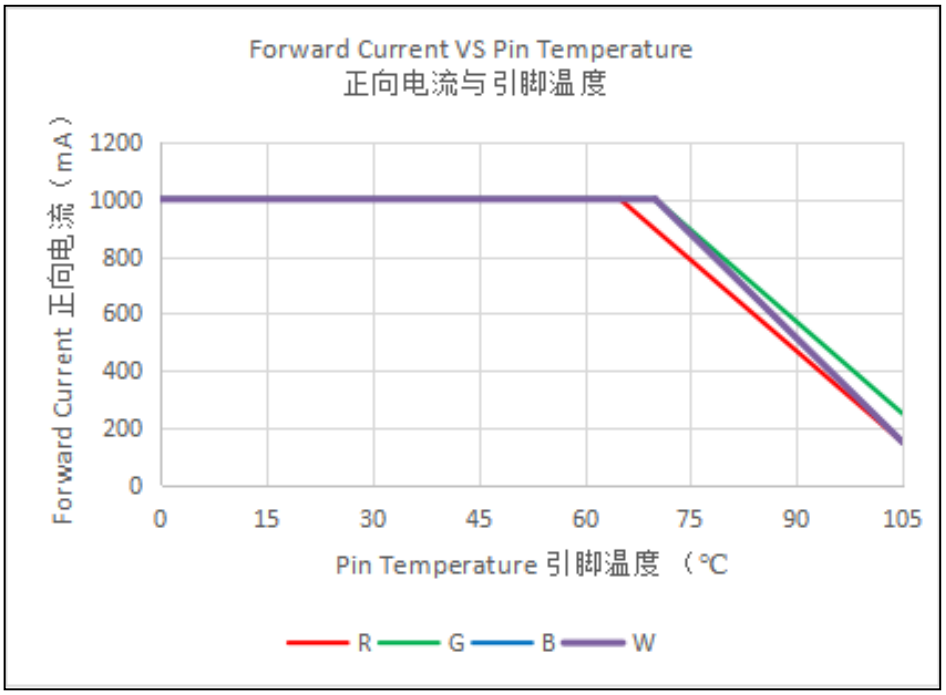
◆ Forward Voltage vs Forward Current 伏安特性曲线



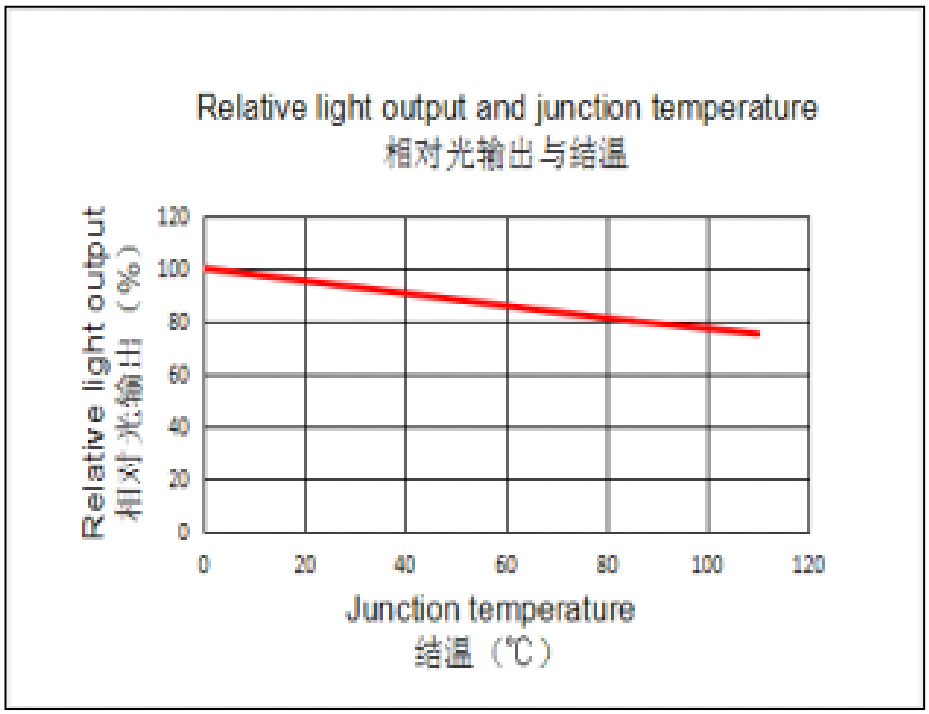
◆ Relative Luminous vs Forward Current 相对光通量与正向电流



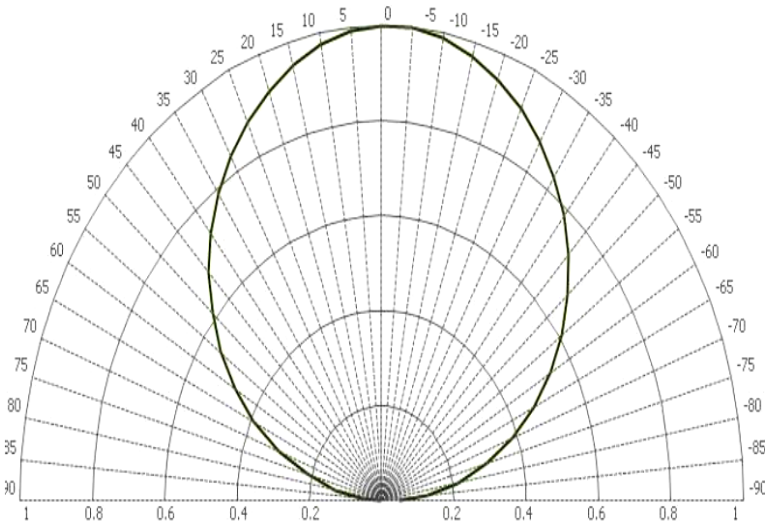
◆ Ambient Temperature vs Forward Current 引脚温度与正向电流



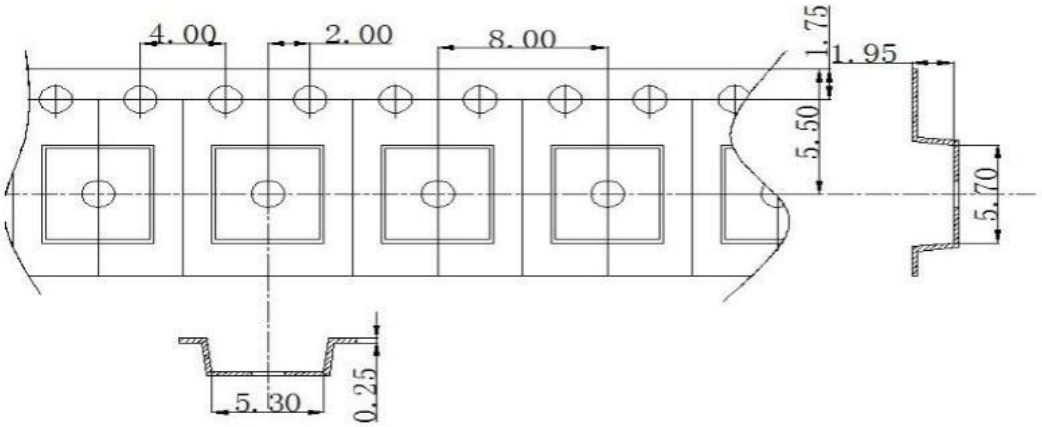
◆ Relative Flux vs Junction Temperature 相对光通量与结温特性曲线



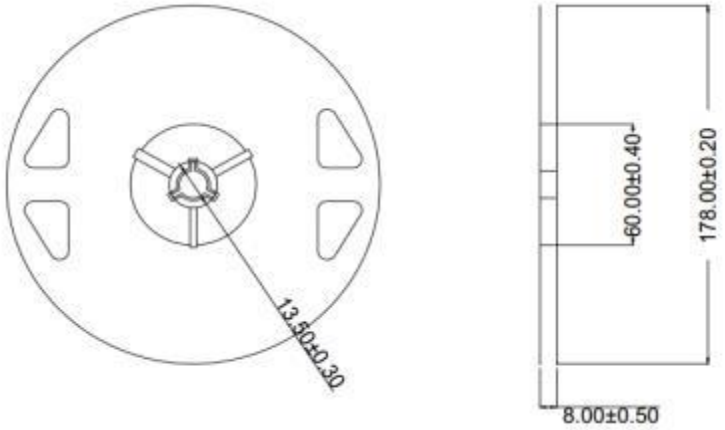
◆ View Angle Distribution 空间角度分布



◆ Packaging Specifications 包装规格



Dimensions of Reel 卷盘规格



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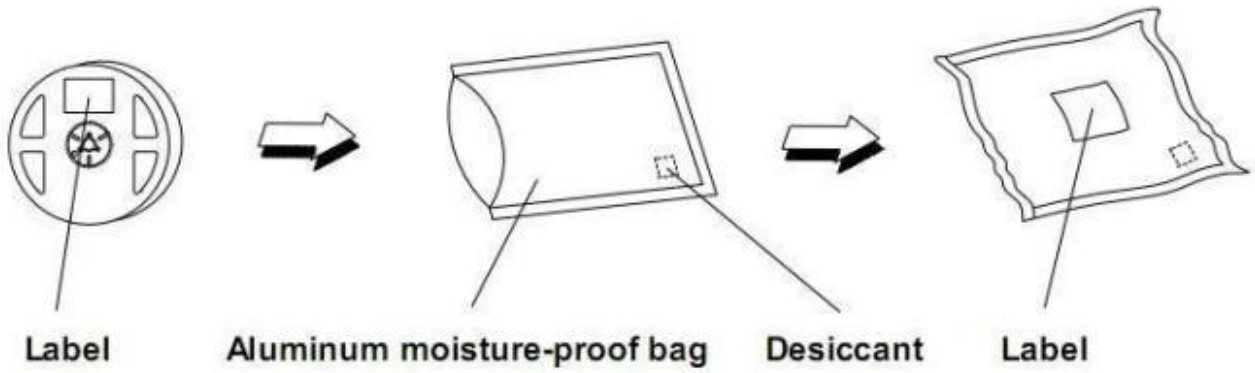


◆ Label(标签):

Part NO： Product model 产品型号

LOT NO：Instruction number 指令单号

IF（mA）： Forward current 正向电流

WLD(nm)： Peak Wavelength 峰值波长

PO（lm）： Radiant flux 辐射通量

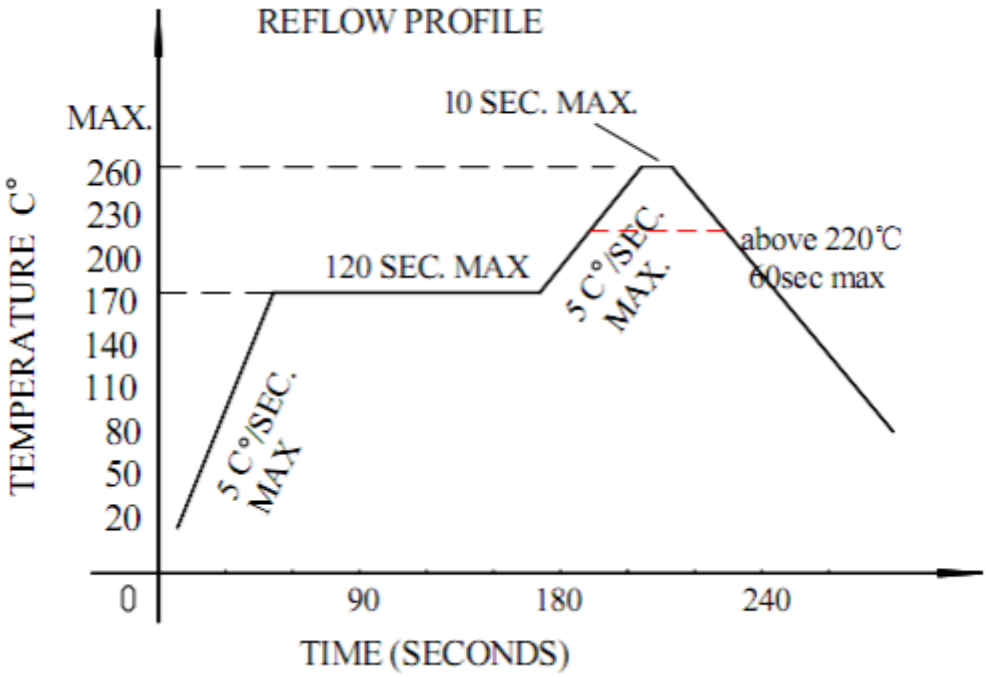
VF（V）：Forward voltage 正向电压

Ra/XY：Color Rendering index/Color Coordinates 显色指数/色区

Q’ty： Quantity 数量

Date： Date 日期

◆ SMT Reflow Soldering Instructions SMT 回流焊说明



1. Reflow soldering should not be done more than two times

   回流焊不可以做两次以上

2. When soldering, do not put stress on the LEDs during heating

   当焊接时，材料受热，不可以用力按压胶体表面

◆ CARTIONS 注意事项

1. Before opening packaging, avoid moisture entry into LED. SMD series LED is suggested to be stored in a drying cabinet with built-in desiccant. The storage environment is 5-30 centigrade, no more than 50% humidity. If storage time is over 3 months, LED needs to be re dehumidifying (65 degrees centigrade for more than /24 hours).

1.开包装前避免湿气进入 LED 内部，建议 SMD 系列 LED 存放在内置干燥剂的干燥柜中，储存环境为温度 5-30℃，湿度不超过 50%，若存储时间超过 3 个月，LED 需要重新除潮（65℃/24 小时以上）。

2.LED electrode and bracket are made of silver plated copper alloy. The silver layer on the surface is easy to be affected by corrosive gases. Please avoid contacting with corrosive environment to cause LED discoloration, so as to avoid the poor weldability of LED and influence the photoelectric performance. Avoid sudden changes in temperature and humidity of the environment, especially under high humidity environment, easy to produce water vapor condensation.

2. LED 电极和支架是由镀银的铜合金组成，外表银层易受到腐蚀性的气体影响，请避免接触腐蚀的环境造成 LED 变色，以免产生 LED 的焊接性变差或者影响光电性能。请避免环境温湿度的骤变，尤其

是高湿环境下易产生水汽凝结。

3.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.

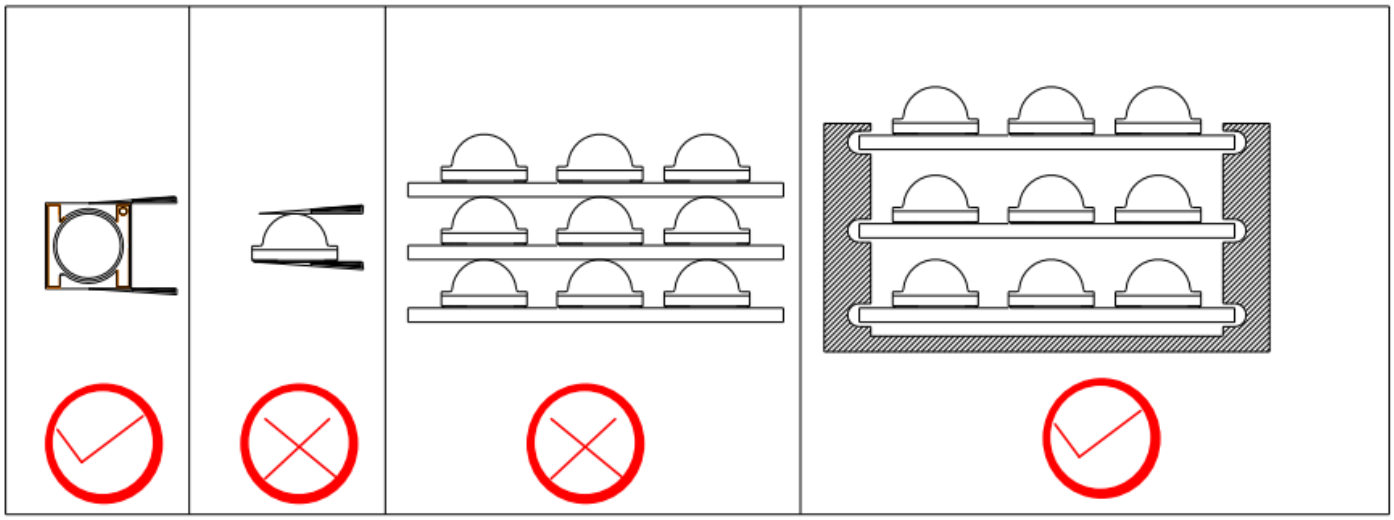
3、LED 封装为硅胶，故 LED 胶体表面较软，用力按压胶体表面会影响 LED 可靠性。应避免使用

较大压力按压胶体表面，在使用吸嘴时，作用于胶体表面的力应适宜。

4.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.

4、采用合适的工具从侧面夹取材料，不要用手或尖锐金属按压胶体表面，否则可能导致内部电路损坏。



5.Electrostatic protection. LED is a chip sensitive electronic component. Various measures should be taken to avoid static electricity, such as wearing an electrostatic bracelet or anti-static gloves during use. All devices, equipment and instruments should be well grounded.

5、静电防护。LED 是晶片敏感电子元器件，应采取各种措施避免静电，诸如在使用过程中戴静电手环或防静电手套。所有的装置、设备仪器应良好接地。