



Snowdragon Industrial Co.,Ltd

DATA SHEET

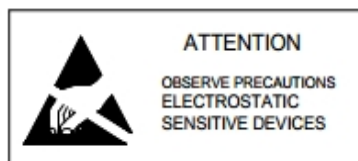
Model NO.:SD-S5050BCU_K1

ENG. NO.:2014022808

Features:

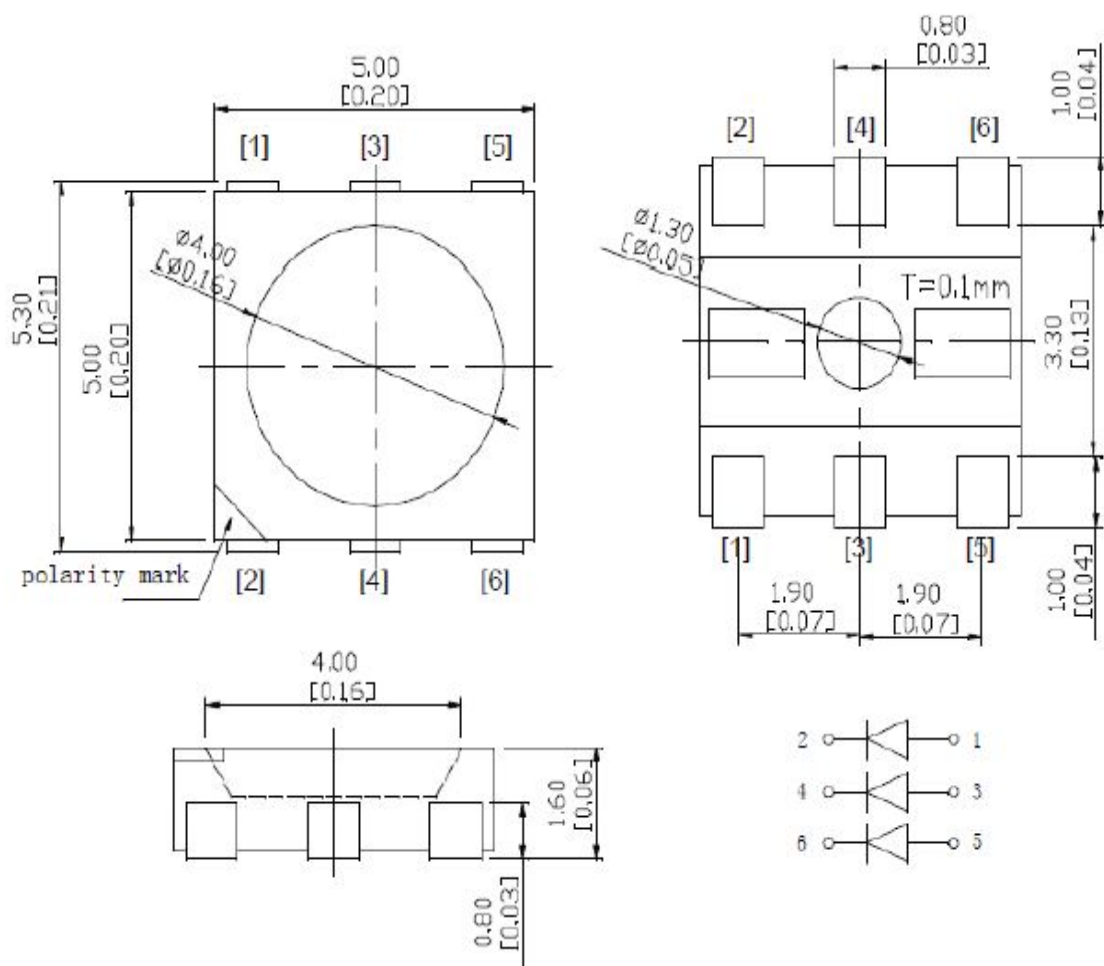
- ※ **5.0*5.0mm Chip SMD**
- ※ **Collid Color: Water Transparent**
- ※ **Emission Color: Blue**
- ※ **Viewing Angle: 120°**

PREPARED BY	CHECKED BY	APPROVED BY
CUSTOMER APPROVED SIGNATURES		



1. 外形尺寸 Dimensions

单位(Units):毫米(mm)



注意:

所有尺寸单位为 mm ， 如无特殊说明误差范围为 $\pm 0.1\text{mm}$

All dimensions area in mm tolerance is $\pm 0.1\text{mm}$ unless otherwise noted.

2. 光电特性 Electrical / Optical characteristics

(1) 最大限度值 Absolute Maximum Ratings (TA=25±5°C)

项目Item	符号 Symbol	最大额定值 Absolute Maximum Rating	单位 Unit
正向电流Forward Current	IF	60	mA
正向峰值电流Pulse Forward Current	IFP	150	mA
反向电压Reverse Voltage	VR	9	V
功率消耗Power Dissipation	PD	100	mW
工作温度Operating Temperature	Topr	-40°C To +85°C	°C
贮藏温度Storage Temperature	Tstg	-40°C To +85°C	°C
焊接温度Soldering Temperature	Tsld	Reflow Soldering: 260°C Hand Soldering : 350°C	for 10sec. for 3sec.

1/10 周期, 0.1 msec 脉宽

IFP Conditions : 1/10 Duty Cycle, 0.1 msec Pulse Width.

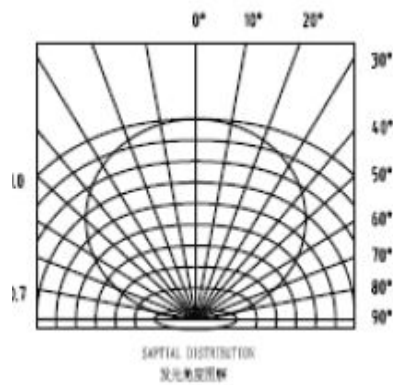
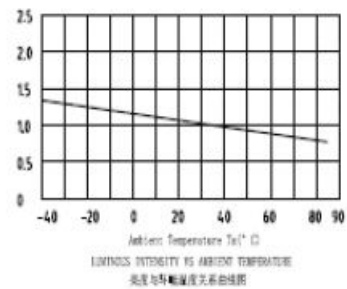
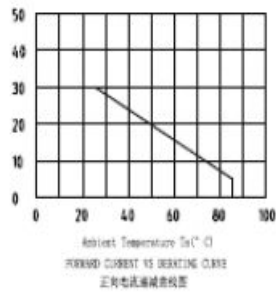
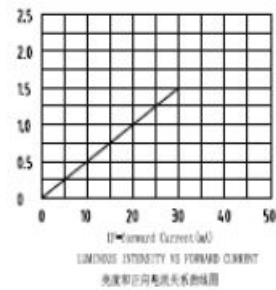
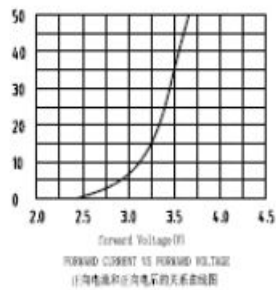
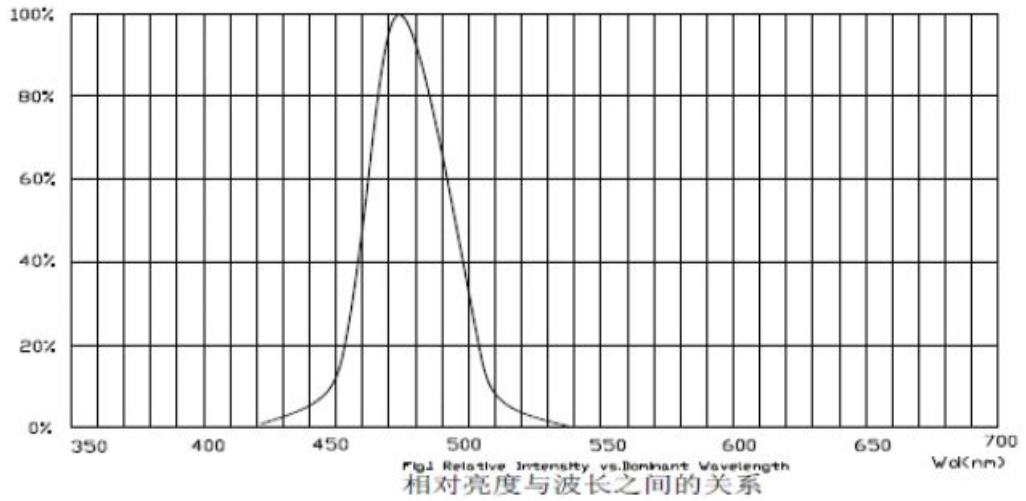
(2) 样品光电参数 Initial Electrical/Optical Characteristics (TA=25±5°C)

符号 Symbol	项目 Item	单位 Units	最小值 Min.	规格值 Typ.	最大值 Max.	测试条件 Test Conditions
VF	正向电压 Forward Voltage	V	3.0		3.2	IF=60mA
IR	反向电流 Reverse Current	uA			10	VR=9V
2θ ½	发光角度 Viewing Angle	°		120°		IF=60mA
∅IV	发光强度 Luminous Intensity	Mcd	600		800	IF=60mA
λD	主波长 Dominate Wavelength	Nm	460		470	IF=60mA

正向电压允许误差± 0.05V Tolerance of measurement of Vf is ±0.05 V.

亮度允许误差± 10% Luminous Intensity Measurement allowance is ± 10%.

3. 特性曲线 Characteristic curve



5. 注意事项 Cautions

(1) 焊接条件 Soldering Conditions

本产品最多只可回焊两次,且在首次回焊后须冷却至室温之后方可进行第二次回焊.

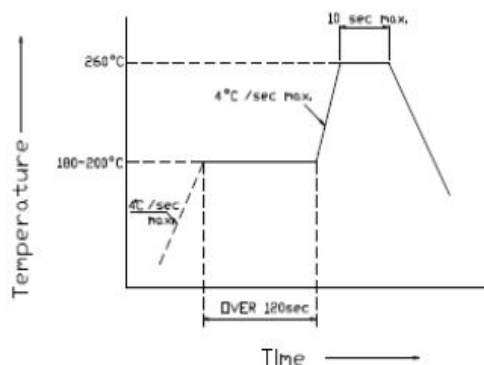
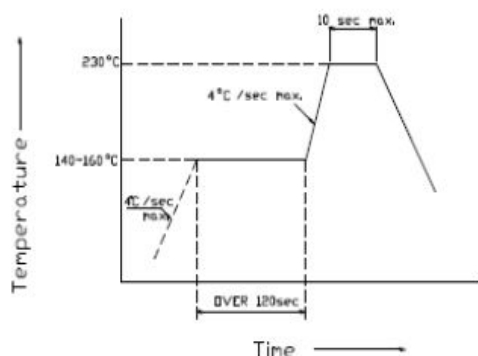
Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and Second soldering process.

推荐焊接条件(Recommended soldering conditions)

回流焊接 Reflow Soldering			手工焊接 Hand Soldering	
	有铅 Lead Solder	无铅 Lead-free Solder	温度 Temperature	350°C Max.
预热温度 Pre-heat	140 ~ 160°C	180 ~ 200°C	焊接时间 Soldering time	3 sec. Max.
预热时间 Pre-heat time	120 sec. Max.	120 sec. Max.		(one time only)
峰值温度 Peak temperature	230°C Max.	260°C Max.		
焊接时间 Soldering time	10 sec. Max.	10 sec. Max.		
条件 Condition	参考下图	参考下图		

有铅回焊 (Lead Solder)

无铅回焊 (Lead-Free Solder)



(2) 静电 Static Electricity

触摸 LED 时,推荐使用防静电手腕带或防静电手套.

It is recommended that a wrist band or an anti-electrostatic glove be used when handling the LEDs.

所有装置、设备、机器均应接地.

All devices, equipment and machinery must be properly grounded.

静电损坏的 LED 会显示出异常特征:正向电压变低或在低电流时死灯.标准: $I_F=0.5mA$ 时, $V_F > 2.0V$

Damaged LEDs will show some unusual characteristics such as the forward voltage becomes lower, or the LEDs do not light at the low current. Criteria : ($V_F > 2.0V$ at $I_F=0.5mA$)

(3) 防潮包装 Moisture Proof Package

使用防潮包装

It is recommended that moisture proof package be used

(4) 储藏 Storage

打开包装袋之前,LED 在温度为 30°C 或更低湿度 70%RH 以下,可保存一年.

