



**ATTENTION**  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
DISCHARGE  
SENSITIVE  
DEVICES

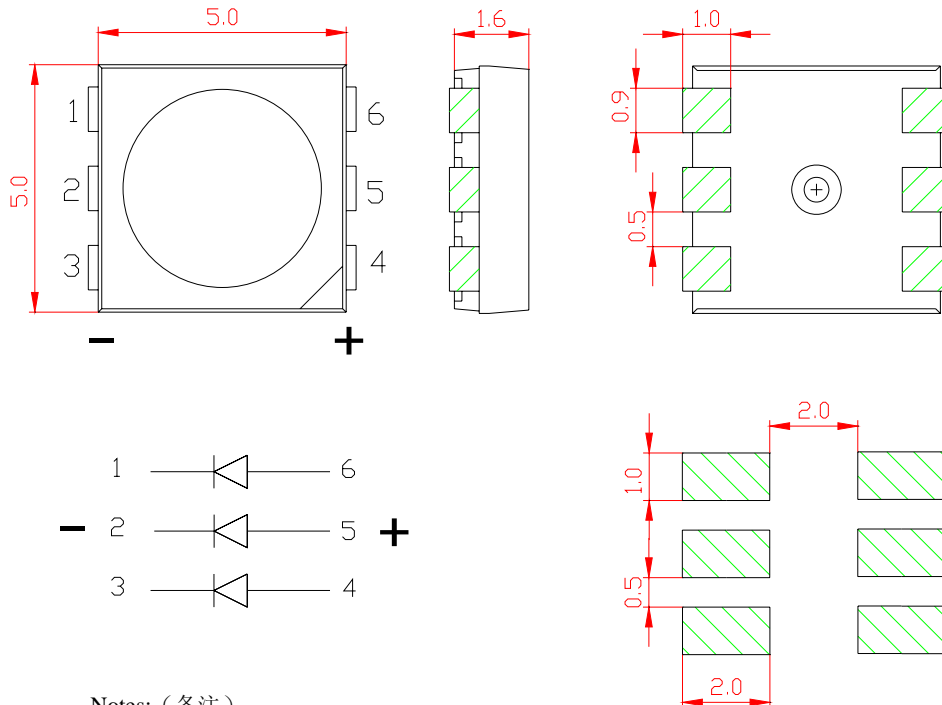
### 1、Features/特征:

- Emitting Color/发光颜色: Yellow/黄色
- Lens Type/封装特性: Water clear/透明
- Device Outline/外形特征: 5.5×5.0×1.6 (unit:mm)
- RoHS compliant/符合 RoHS 标准

### 2、Applications/应用:

- Backlight for Mobile, Machine Vision, LCD Display/手机、电话、显示屏背光源
- Backlight in Dashboard and switch of Automive/汽车仪表盘、记程器背光源

### 3、Outline Dimensions/产品外形尺寸 (units:mm) :



参考焊盘尺寸



#### 4、Absolute maximum ratings/极限参数 (Ta = 25°C):

Parameter 参数	Color 颜色	Symbol 符号	Values 数值	Unit 单位
Power Dissipation 损耗功率	yellow	Pd	60	mW
			60	
			60	
Reverse Voltage 反向电压	yellow	VR	7	V
			7	
			7	
Pulse Current 正向峰值电流 <sup>[1]</sup>	yellow	IFp	100	mA
			100	
			100	
Forward Current 正向工作电流	yellow	IFm	25	mA
			25	
			25	
Operating Temperature 工作温度范围	yellow	Topr	- 40 ~ +85	°C
Storage Temperature 储存温度范围	yellow	Tstr	- 40 ~ +100	°C

**Notes/备注:** [1]. 0.1ms pulse width, 1/10 Duty. / [1] 脉冲宽度0.1ms, 占空比1/10。



#### 5、Electrical and optical characteristics/光电参数 (Ta = 25°C):

Parameter 参数	Color 颜色	Symbol 符号	Test Condition 测试条件	Value 参数 <sup>[2]</sup>			Unit 单位
				Min	Typ	Max	
Forward Voltage 正向电压	yellow	V <sub>F</sub>	I <sub>F</sub> = 60mA	1.6	---	2.4	V
Reverse Current 反向电流	yellow	I <sub>R</sub>	V <sub>R</sub> = 7V	---	---	30	μ A
	yellow			---	---	30	
	yellow			---	---	30	
Luminous Intensity 发光强度	yellow	I <sub>v</sub>	I <sub>F</sub> = 60mA	1500	1900	---	mcd
Dominate Wavelength 主波长	yellow	λ <sub>d</sub>	I <sub>F</sub> = 60mA	588	592	594	nm
Peak Wavelength 峰值波长	yellow	λ <sub>p</sub>	I <sub>F</sub> = 60mA	---	594	---	nm
Viewing Angle 发光指向角	yellow	2 θ 1/2	I <sub>F</sub> = 60mA	---	120	---	Deg.
Luminous Flux 光通量 <sup>[1]</sup>	yellow	φ	I <sub>F</sub> = 60mA	---	6.8	---	lm

**Notes/备注:** [1] The test standard is the luminous intensity, and the luminous flux is for your reference only./[1] 本公司以发光强度为分档标准, 光通量仅供参考。[2] Tolerance 误差: V<sub>F</sub>: ±0.10V, I<sub>v</sub>/Flux: ±15%, 其它: ±5%



#### 6、Product Rank/产品分档

##### Luminous Intensity / 发光强度 (mcd)

(Ta=25°C)

Rank	U1	U2	V1
lv	1520~1900	1900~2130	2130-2550

##### Wavelength / 波长 (nm)

(Ta=25°C)

Rank	Y1	Y2	Y3	Y4	Y5
WLD	582-585	585-588	588-591	591-594	594-597

##### Voltage / 电压 (V)

(Ta=25°C)

Rank	V7	V8	V9	V10
Vf	1.6-1.8	1.8-2.0	2.0-2.2	2.2-2.4

**Notes/备注:** Rank error/分档误差: lv: ±15%, λ d: ±1nm, Vf: ±0.10v



### 7、Typical electrical/optical characteristic curves/光电特性曲线:

Fig.1 正向电流 Vs. 正向电压

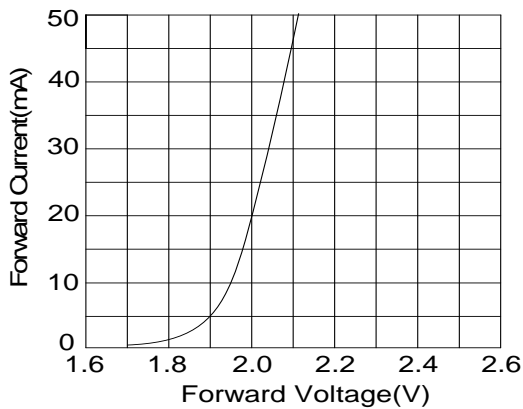


Fig.2 相对亮度 Vs. 正向电流

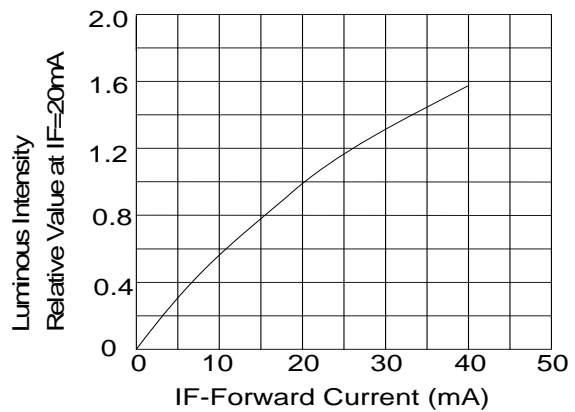


Fig.3 正向电流 Vs. 环境温度

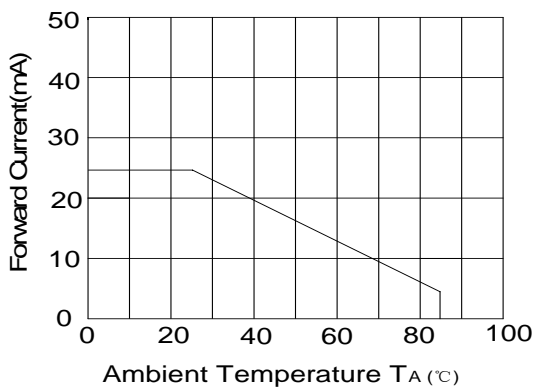


Fig.4 相对亮度 Vs. 环境温度

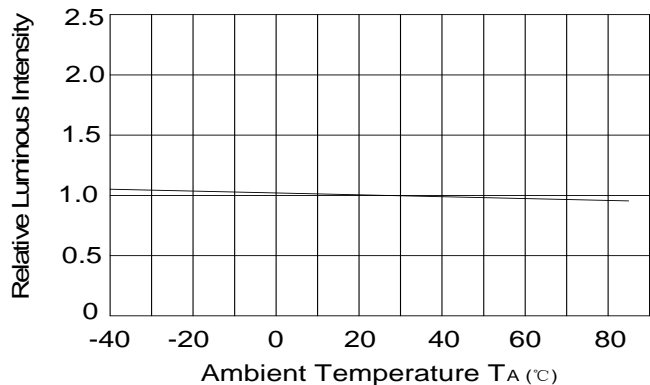
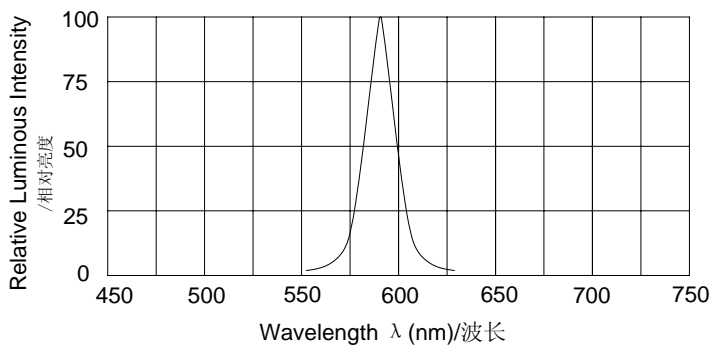
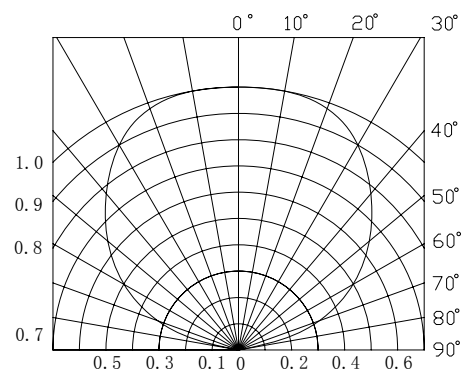


Fig.5 相对亮度 Vs. 波长



SPATIAL DISTRIBUTION





## 8、Relibility Analysis/可靠性试验

### 8.1 Test Items And Results/测试项目和判据

No.	Item/项目	Test Condition/测试条件	Spec. / 引用标准	Q'ty/数量	Time/时间	Standard/判定
1	IR Reflow (Reflow Soldering) 回流焊接	Tsld=220°C, 10sec	GB/T 4937, II, 2.2	20	2times	ALL PASS
2	Solder ability 可焊性	Tsld=235±5°C, 3sec	GB/T 4937, II, 2.1	20	1times Over 95%	ALL PASS
3	Temperature Cycle 高低温循环	-40°C—— 100°C 30min ~ 30min The cut is not more than 5 min	GB/T 4937, III, 1	20	50cycles	ALL PASS
4	Moisture Resistance Cyclic 湿热循环	25°C/12hr~ 55°C/12hr 95%RH	GB/T 4937, III, 4	20	6cycles	ALL PASS
5	High Temperature Storage 高温储存	Ta=100°C	GB/T 4937, III, 2	20	1000hrs	ALL PASS
6	Low Temperature Storage 低温储存	Ta=-40°C	GB/T 4937, III, 2	20	1000hrs	ALL PASS
7	Steady State perating Life 电耐久性	IF=60mA Ta=25°C	GB/T 18904.3 Part A	20	1000hrs	ALL PASS

### 8.2 Criteria For Judging Damage/判断标准

Item/项目	Symbol/符号	Test conditions /测试条件	Criteria for Judgement /判断标准	
			Min./最小值	Max./最大值
Luminous Intensity/亮度	Iv	IF=60mA	L.S.L *0.7	/
Forward Voltage/正向电压	VF	IF=60mA	/	U.S.L*1.1
Reverse current/反向电流	IR	VR=7v	/	U.S.L*2

\*U.S.L.: Upper Standard Level / 上限

\*L.S.L.: Lower Standard Level / 下限