



## SMD SPECIFICATION

Part No./型号 PLCC2LGCT



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

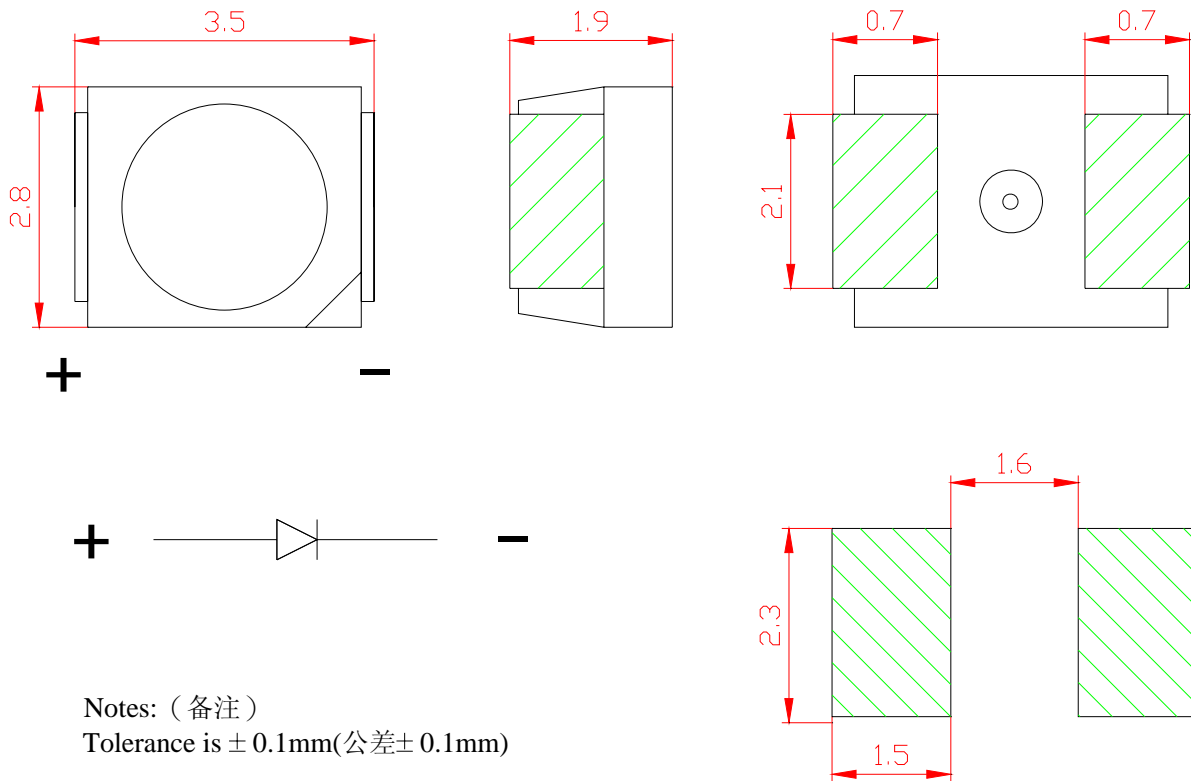
### 1、Features/特 征:

- Emitting Color/发光颜色: Green/绿色
- Lens Type/封装特性: Water Clear/无色透明
- Device Outline/外形特征: 3.5×2.8×1.9mm

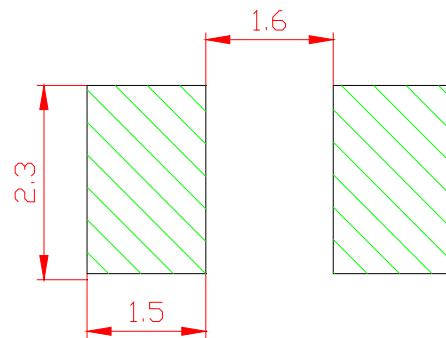
### 2、Applications/应 用:

- 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:



Notes: (备注)  
Tolerance is  $\pm 0.1\text{mm}$ (公差 $\pm 0.1\text{mm}$ )



参考焊盘尺寸



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

Parameter 参数	Symbol 符号	Value 参数	Unit 单位
Power Dissipation 损耗功率	Pd	90	mW
Reverse Voltage 反向电压	VR	5	V
Pulse Current 正向峰值电流 <sup>[1]</sup>	IFp	100	mA
Forward Current 正向工作电流	IFm	25	mA
Operating Temperature 工作温度范围	Topr	- 40 ~ +85	℃
Storage Temperature 储存温度范围	Tstr	- 40 ~ +100	℃

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℃):

Parameter 参数	Symbol 符号	Test Condition 测试条件	Value 参数 <sup>[1]</sup>			Unit 单位
			Min.	Typ.	Max.	
Forward Voltage 正向电压	VF	IF=20mA	—	3.2	3.5	V
Reverse Current 反向电流	IR	VR=5V	—	—	30	μ A
Dominate Wavelength 主波长	λ d	IF=20mA	520	—	525	nm
Peak Wavelength 峰值波长	λ p	IF=20mA	—	—	—	nm
Spectral Line half-width 半波宽度	Δ λ	IF=20mA	—	—	—	nm
Luminous Intensity 发光强度	IV	IF=20mA	770	1100	—	mcd
Viewing Angle 发光指向角	2 θ 1/2	IF=20mA	—	120	—	Deg.

Notes/备注: [1] Tolerance 误差: VF: ±0.10V, Iv: ±15%, 其它: ±5%



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### 6、Product Rank/产品分档

#### Luminous Intensity / 发光强度 (mcd)

(Ta=25°C)

Rank	S	T
Iv	770~1100	1100~1520

#### Wavelength / 波长 (nm)

(Ta=25°C)

Rank	G10	G11	G12
WLD	518-521	521-524	524-527

#### Voltage / 电压 (V)

(Ta=25°C)

Rank	Q	R	S	T	U
Vf	3.0-3.1	3.1-3.2	3.2-3.3	3.3-3.4	3.4-3.5

**Notes/备注:** Rank error/分档误差: Iv:  $\pm 15\%$ ,  $\lambda d$ :  $\pm 1\text{nm}$ , Vf:  $\pm 0.10\text{v}$

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

Fig.1 正向电流 Vs. 正向电压

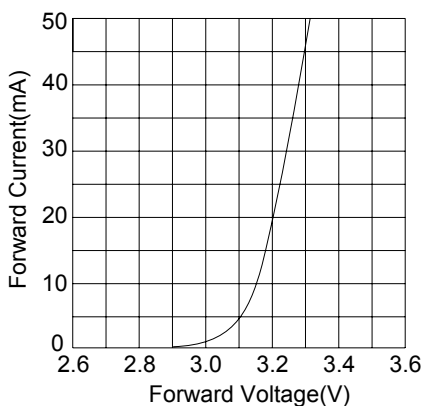


Fig.2 相对亮度 Vs. 正向电流

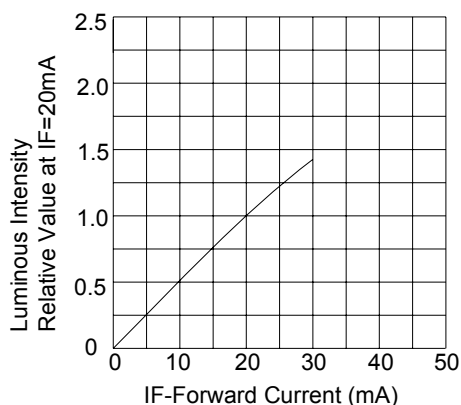


Fig.3 正向电流 Vs. 环境温度

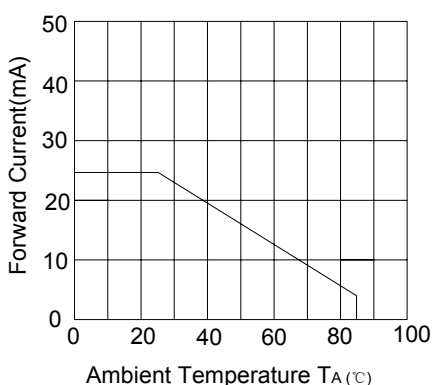


Fig.4 相对亮度 Vs. 环境温度

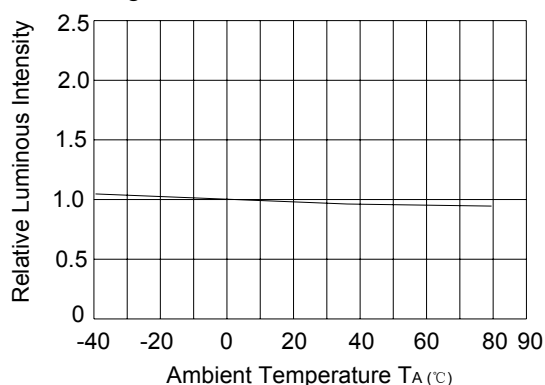
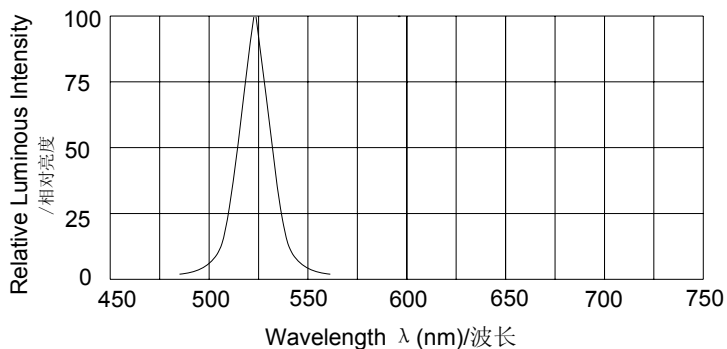
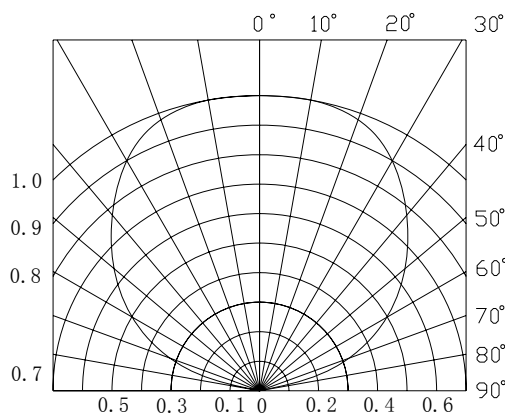


Fig.5 相对亮度 Vs. 波长



### SPATIAL DISTRIBUTION











#### 9.5 Cleaning/ 清洗

It is recommended that isopropyl alcohol be used as a solvent for cleaning the LEDs. It should be confirmed beforehand whether the solvents will dissolve the package the resin or not when using other solvents. Before cleaning, a pre-test should be done to confirm whether any damage to the LEDs will occur. Please do not clean the LEDs by the ultrasonic.

建议使用酒精作为溶剂清洗LED。若要使用其他溶剂，应该预先证实是否能溶化封装料。在清洗作业前，必须预先实验确认对LEDs无任何的伤害。请不要使用超声波清洗LED。

#### 9.6 Static Electricity/ 静电

It is recommended that a wrist band or an anti-electrostatic glove be used when handling the LEDs. All devices, equipment and machinery must be properly grounded. It is recommended that precautions be taken against surge voltage to the equipment that mounts the LEDs.

在接触LED时，建议使用防静电手腕带或防静电手套。所有的器件、设备和机器必须有可靠的接地。对所有LED接触的设备，建议采取预防措施消除冲击电压。

#### 9.7 Others/ 其他

1. The LED light output is strong enough to injure human eyes. Precautions must be taken to prevent looking directly at the LEDs with unaided eyes for more than a few seconds.

LED的光辐射足够强时，会对人眼造成伤害。若眼睛要直接看LED，并且要一定的时间，则必须采取相应防护措施。

2. 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。

3. Not suitable to operate in acidic environment, PH<7

LED不可用在PH<7的酸性环境。

4. When we need to use external glue for LED application products, please make sure that the external glue matches the LED packaging glue. Additionally, as most of LED packaging glue is silica gel, and it has strong Oxygen permeability as well as strong moisture permeability; in order to prevent external material from getting into the inside of LED, which may cause the



malfunction of LED, the single content of Bromine element is required to be less than 900PPM, the single content of Chlorine element is required to be less than 900PPM, the total content of Bromine element and Chlorine element in the external glue of the application products is required to be less than 1500PPM.

在使用外封胶涂抹LED产品时,应确保外封胶与LED封装胶水相匹配,因为大多数LED的封装胶水为硅胶,它有较强的氧化性和较强的吸湿性,必须防止外封材质进入LED内部以造成LED的损伤,单一的溴元素含量要求小于900PPM,单一氯元素含量要求小于900PPM,在涂抹LED产品时要求外封胶溴元素与氯元素总含量必须小于1500PPM。

5. To ensure the quality of our LEDs, So please do not put pressure on the LEDs.

为确保LED的可靠性,在操作过程中不可施加压力在LED器件胶体表面。



✓ 正确



✗ 错误