

ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

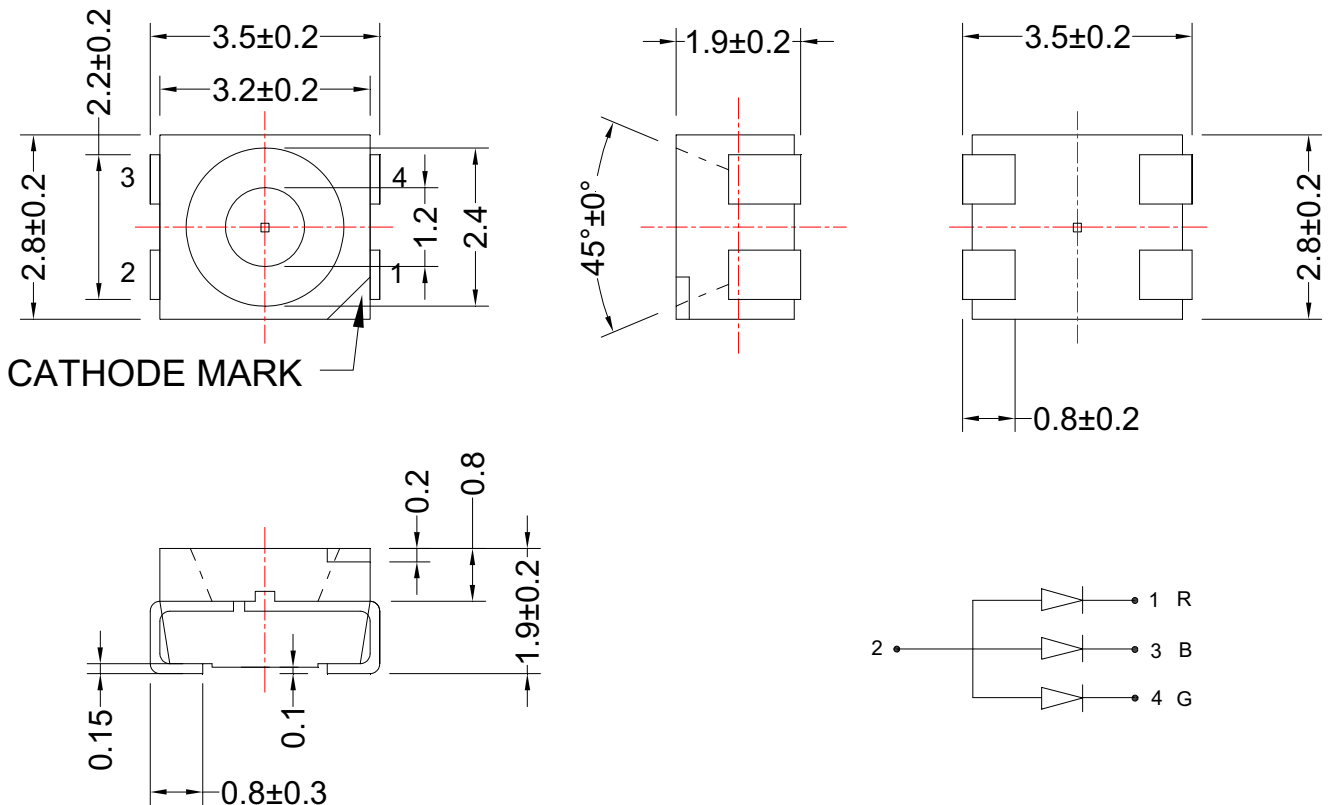
1、Features/特 征:

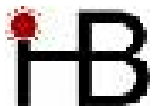
- Emitting Color/发光颜色: Red/Green/Blue/红色/绿色/蓝色
- Lens Type/封装特性: Water clear/透明
- Device Outline/外形特征: 3.5×2.8×1.9 (unit:mm)
- RoHS compliant/符合 RoHS 标准

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) :



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

| Parameter 参数 | Color 颜色 | Symbol 符号 | Test Condition 测试条件 | Values 数值 | | Unit 单位 |
|---------------------------------|-------------|--------------|------------------------|-----------|------|------------|
| | | | | Min. | Max. | |
| Power Dissipation 损耗功率 | Red | Pd | — | — | 60 | mW |
| | Green | | | — | 85 | |
| | Blue | | | — | 90 | |
| Reverse Voltage 反向电压 | Red | VR | IR = 30 μ A | 5 | — | V |
| | Green | | | | | |
| | Blue | | | | | |
| Pulse Current 正向峰值电流 | Red | Ifp | Duty=0.1, 1kHz | — | 100 | mA |
| | Green | | | | | |
| | Blue | | | | | |
| Forward Current 正向工作电流 | Red | Ifm | — | — | 25 | mA |
| | Green | | | | | |
| | Blue | | | | | |
| Operating Temperature 工作温度范围 | Red | Topr | — | -40 | +85 | ℃ |
| | Green | | | | | |
| | Blue | | | | | |
| Storage Temperature 储存温度范围 | Red | Tstr | — | -40 | +85 | ℃ |
| | Green | | | | | |
| | Blue | | | | | |



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

| Parameter 参数 | Color 颜色 | Symbol 符号 | Test Condition 测试条件 | Values 数值 | | | Unit 单位 |
|-----------------------------------|-------------|----------------|------------------------|-----------|-----|-----|------------|
| | | | | Min | Typ | Max | |
| Forward Voltage 正向电压 | Red | V _F | I _F = 20mA | — | 2.0 | 2.4 | V |
| | Green | | | — | 3.2 | 3.5 | |
| | Blue | | | — | 3.2 | 3.6 | |
| Reverse Current 反向电流 | Red | I _R | V _R =5V | — | — | 10 | μ A |
| | Green | | | — | — | 30 | |
| | Blue | | | — | — | 30 | |
| Dominate Wavelength 主波长 | Red | λ _d | I _F = 20mA | — | 625 | — | Nm |
| | Green | | | — | 525 | — | |
| | Blue | | | — | 470 | — | |
| Peak Wavelength 峰值波长 | Red | λ _p | I _F =20mA | — | — | — | Nm |
| | Green | | | — | — | — | |
| | Blue | | | — | — | — | |
| Spectral Line half-width 半波长宽度 | Red | Δ λ | I _F = 20mA | — | 20 | — | Nm |
| | Green | | | — | — | — | |
| | Blue | | | — | 30 | — | |
| Luminous Intensity 发光强度 | Red | I _v | I _F = 20mA | 102 | 160 | — | Mcd |
| | Green | | | 280 | 500 | — | |
| | Blue | | | 102 | 180 | — | |
| Viewing Angle 发光指向角 | Red | 2 θ 1/2 | I _F = 20mA | — | 120 | — | Deg. |
| | Green | | | — | — | — | |
| | Blue | | | — | — | — | |

6、Product Rank/产品分档

Luminous Intensity / 发光强度 (mcd)

(Ta=25℃)

| Rank | Blue | Green | Red |
|------|---------|---------|---------|
| B | 102~145 | 280~390 | 145~200 |
| C | 145~200 | | |



Part No.: **PLCC4RGBCT-CA**

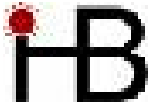
| Rank | Blue | Green | Red | |
|------|---------|---------|---------|---------|
| D | 102~145 | 390~550 | 145~200 | |
| E | 145~200 | | | |
| F | 102~145 | 550~770 | | |
| G | 145~200 | | | |
| H | 102~145 | 280~390 | 200~280 | |
| J | 145~200 | | | |
| K | 102~145 | 390~550 | | |
| L | 145~200 | | | |
| M | 102~145 | 550~770 | | |
| N | 145~200 | | | |
| P | 102~145 | 280~390 | | 280~390 |
| Q | 145~200 | | | |
| R | 102~145 | 390~550 | | |
| S | 145~200 | | | |
| T | 102~145 | 550~770 | | |
| U | 145~200 | | | |
| V | 200~280 | 280~390 | 145~200 | |
| W | | | 200~280 | |
| X | | | 280~390 | |
| Y | | 390~550 | 145~200 | |
| Z | | | 200~280 | |
| ZA | | 280~390 | | |
| ZB | | 550~770 | 145~200 | |
| ZC | | | 200~280 | |
| ZD | | | 280~390 | |

Wavelength / 波长 (nm)

(Ta=25°C)

| Rank | Blue | Green | Red |
|------|---------|---------|---------|
| B | 465~470 | 520~525 | 620~630 |
| C | 470~475 | | |
| D | 465~470 | 525~530 | |
| E | 470~475 | | |

Notes/备注: Rank error/分档误差: Iv: ±15%, λd: ±1nm



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

Fig.1 正向电流 Vs. 正向电压

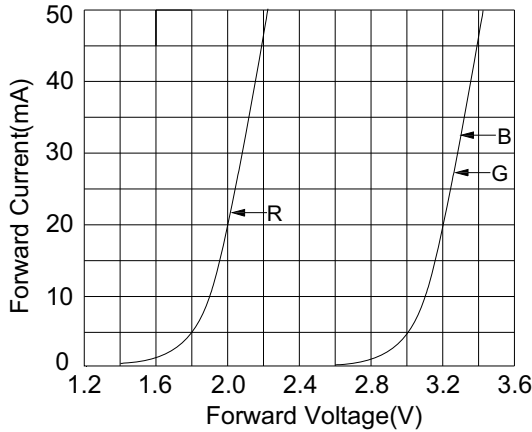


Fig.2 相对亮度 Vs. 正向电流

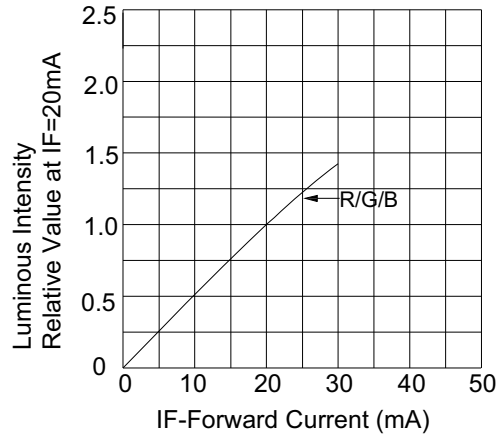


Fig.3 正向电流 Vs. 环境温度

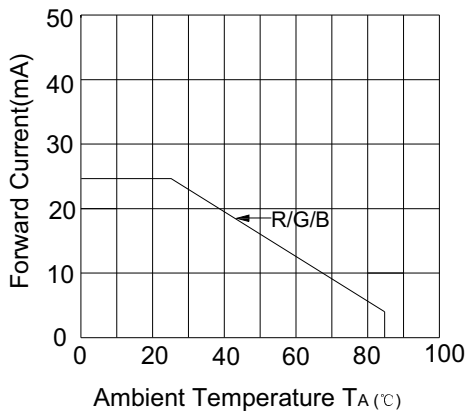


Fig.4 相对亮度 Vs. 环境温度

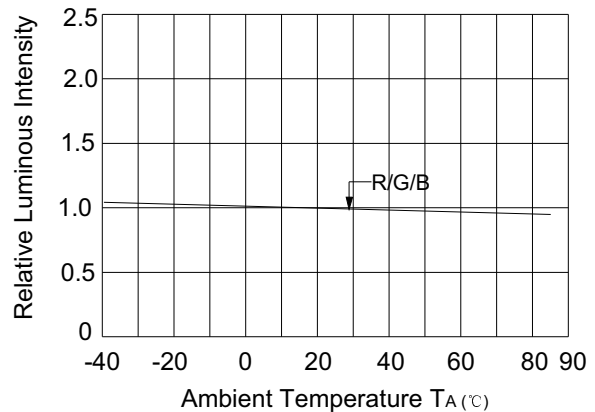
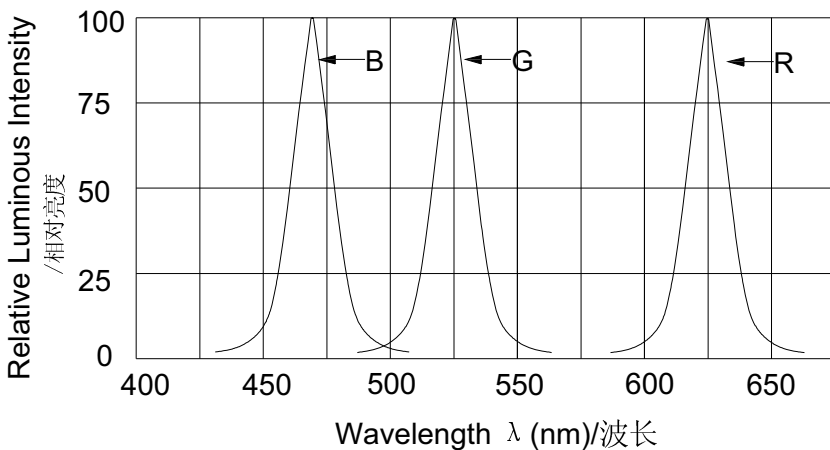


Fig.5 相对亮度 Vs. 波长



SPATIAL DISTRIBUTION

