

LED-PLCC4RGB

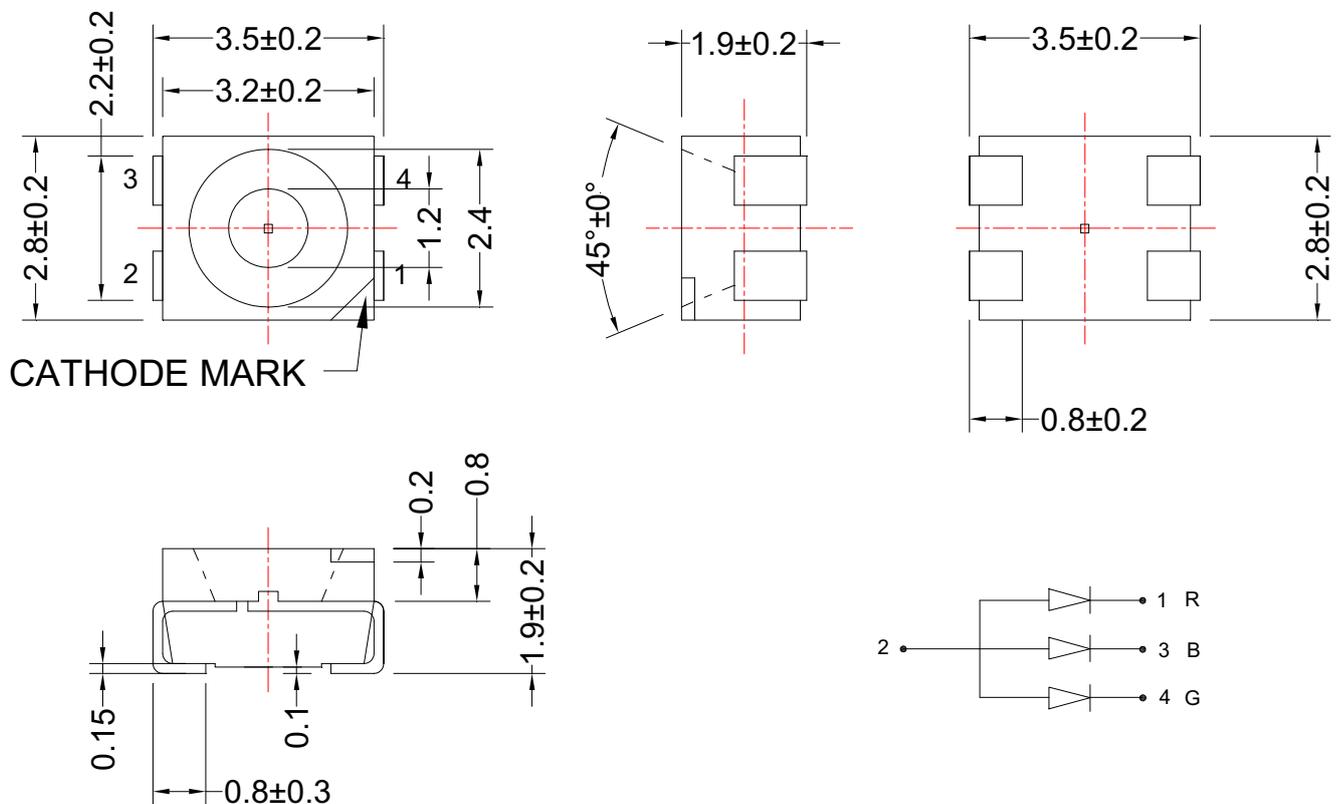
ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

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: $3.5 \times 2.8 \times 1.9$ (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) :

LED-PLCC4RGB**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、Electric (and optical) characteristics / 光电参数 (T = 25 °C):

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	μA
	Green			—	—	30	
	Blue			—	—	30	
Dominant 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	Δλ	I _F = 20mA	—	20	—	nm
	Green			—	—	—	
	Blue			—	30	—	
Luminous Intensity 发光强度	Red	I _v	I _F = 20mA	102	280	—	mcd
	Green			280	770	—	
	Blue			145	280	—	
Viewing Angle 发光指向角	Red	2θ _{1/2}	I _F = 20mA	—	120	—	Deg.
	Green			—	—	—	
	Blue			—	—	—	

6、Product Rank / 产品分档

Luminous Intensity / 发光强度 (mcd)

(I_a = 25 °C)

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

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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

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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

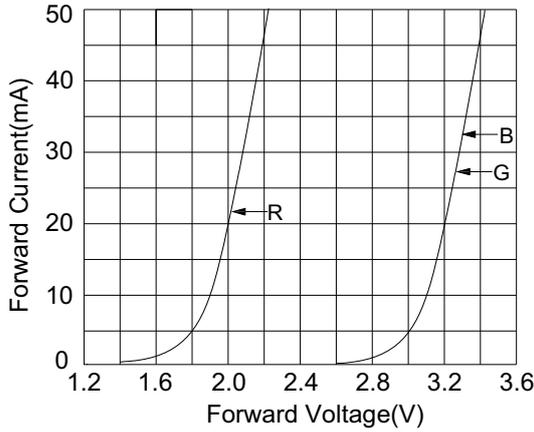


Fig.2 相对亮度 Vs. 正向电流

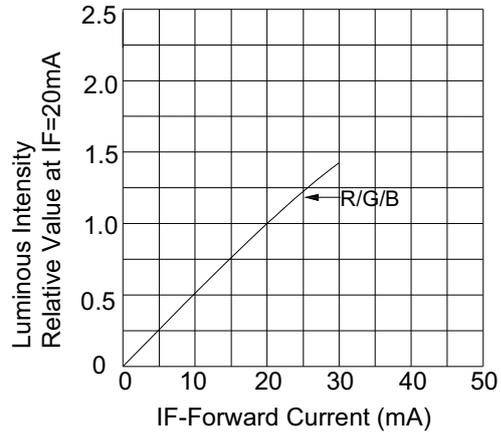


Fig.3 正向电流 Vs. 环境温度

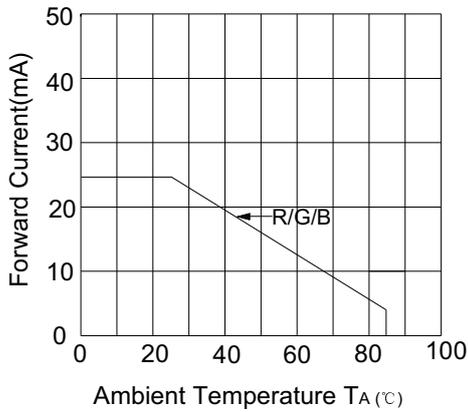


Fig.4 相对亮度 Vs. 环境温度

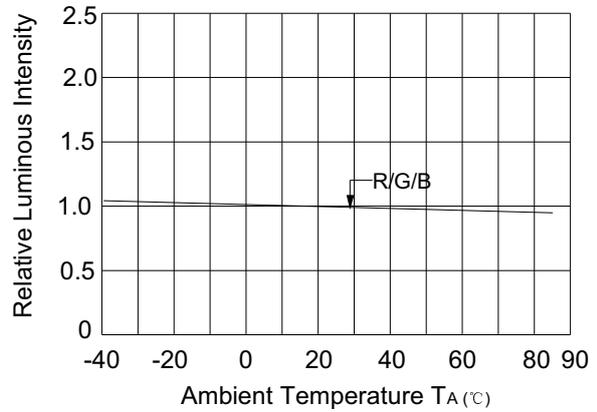
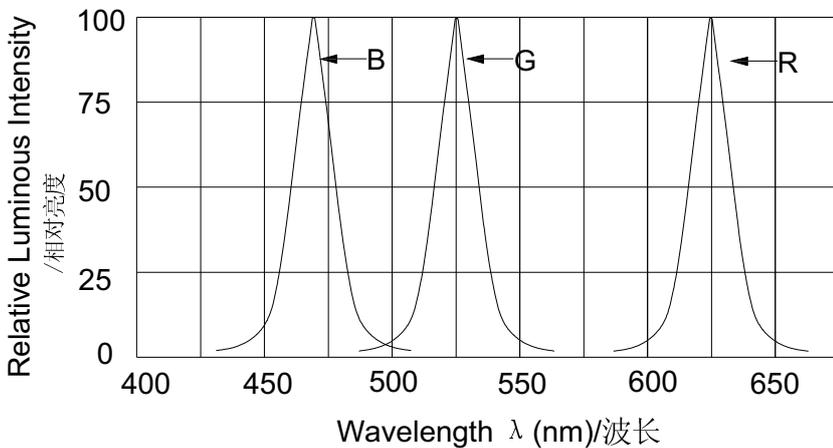


Fig.5 相对亮度 Vs. 波长



SPATIAL DISTRIBUTION

