

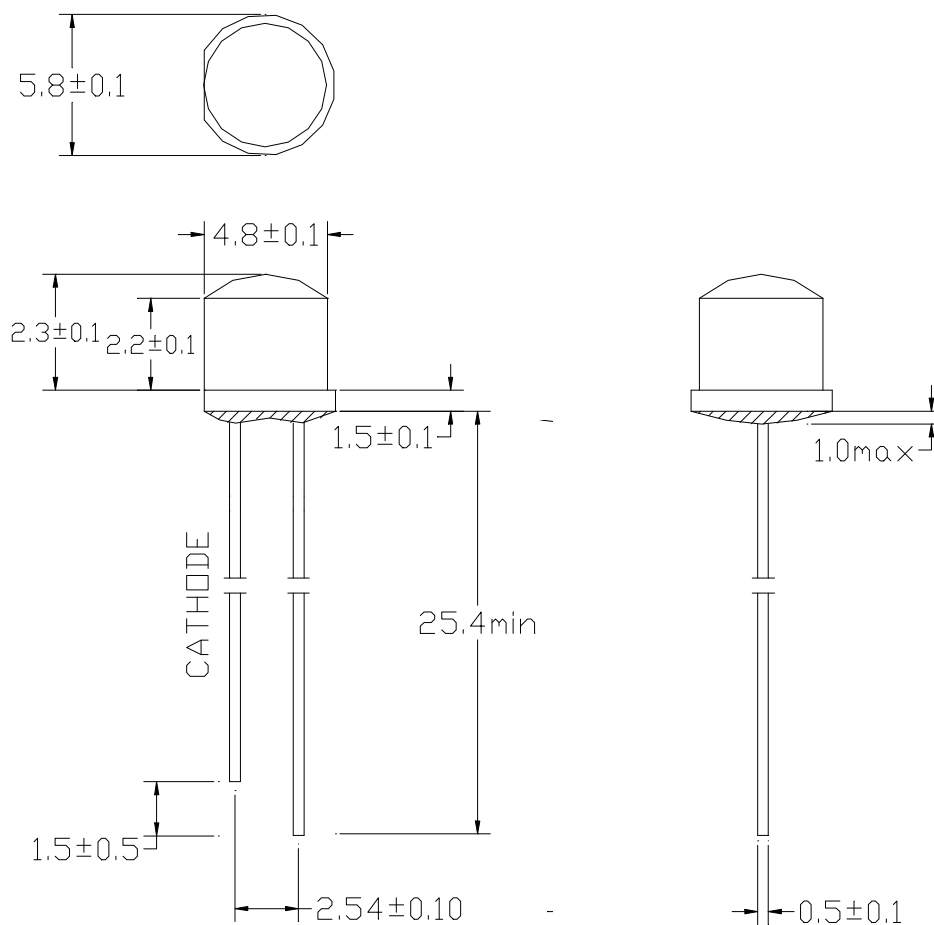


➤ **Features/特征:**

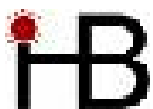
- Single color/单色
- High bright output/高亮度输出
- Large view angle/大视角
- Low power consumption/低功耗
- High reliability and long life/  
可靠性高、寿命长

➤ **Descriptions/描述:**

- Dice material/芯片材质: AlGaInP
- Emitting Color/发光颜色:  
Super Bright Red/ 高亮度红色
- Device Outline/产品外形:  
φ 5mm Round Type/ 5mm 圆形
- Lens Type 胶体颜色:  
Water Clear/ 无色透明



1. All dimensions are millimeters/单位: mm.
2. Tolerance is  $\pm 0.25$ mm unless otherwise noted/没有标注的公差均为  $\pm 0.25$ mm.



➤ **Absolute maximum ratings/极限参数 (Ta = 25°C)**

Parameter 参数	Symbol 符号	Test Condition 测试条件	Values 数值		Unit 单位
			Min.	Max.	
Reverse Voltage 反向电压	V <sub>R</sub>	I <sub>R</sub> = 30 μ A	5	--	V
Forward Current 正向工作电流	I <sub>F</sub>	----	----	30	mA
Power Dissipation 损耗功率	P <sub>d</sub>	----	----	75	mW
Pulse Current 正向峰值电流	I <sub>peak</sub>	Duty=0.1mS, 1kHz	----	100	mA
Operating Temperature 工作温度范围	T <sub>opr</sub>	----	-40	+85	°C
Storage Temperature 储存温度范围	T <sub>str</sub>	----	-40	+100	°C

➤ **Electrical and optical characteristics/光电参数 (Ta = 25°C)**

Parameter 参数	Symbol 符号	Test Condition 测试条件	Values 数值			Unit 单位
			Min.	Typ.	Max.	
Forward Voltage 正向电压	V <sub>F</sub>	I <sub>F</sub> =20mA	----	2.2	2.6	V
Reverse Current 反向电流	I <sub>R</sub>	V <sub>R</sub> =5V	----	----	30	μ A
Dominate Wavelength 主波长	λ <sub>d</sub>	I <sub>F</sub> =20mA	----	626	----	nm
Peak Wavelength 峰值波长	λ <sub>p</sub>	I <sub>F</sub> =20mA	----	632	----	nm
Spectral Line half-width 半波长宽度	Δ λ	I <sub>F</sub> =20mA	----	20	----	nm
Luminous Intensity 发光强度	I <sub>v</sub>	I <sub>F</sub> =20mA	80	----	----	mcd



# BIN ranking for LEDs

## BRIGHTNESS BIN

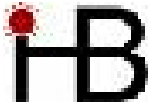
Bin Code	IV(mcd)	Bin Code	IV(mcd)	Bin Code	IV(mcd)	Bin Code	IV(mcd)
A	0-5.0	H	37.2-52.0	Q	390-550	X	4180--5860
B	5.0-7.0	J	52.0-72.8	R	550-770	Y	5860-8200
C	7.0-9.8	K	72.8-102	S	770-1100	Z1	8-10cd
D	9.8-13.7	L	102-145	T	1100-1520	Z2	10-12cd
E	13.7-19.0	M	145-200	U	1520-2130	Z3	12-14cd
F	19.0-26.6	N	200-280	V	2130-3000	Z4	14-16cd
G	26.6-37.2	P	280-390	W	3000-4180	Z5	16-18cd

## WAVELENGTH BIN

Ligth Col.	Bin Code	Wavel. (nm)	Ligth Col.	Bin Code	Wavel. (nm)	
<b>BLUE</b>	B1	450-455	<b>YELLOW GREEN</b>	YG1	555-558	
	B2	455-460		YG2	558-561	
	B3	460-465		YG3	561-564	
	B4	465-470		YG4	564-567	
	B5	470-475		YG5	567-570	
	B6	475-480		YG6	570-573	
<b>BLUE GREEN</b>	G1	491-494		YG7	573-576	
	G2	494-497	<b>YELLOW</b>	Y1	582-585	
	G3	497-500		Y2	585-588	
	G4	500-503		Y3	588-591	
	G5	503-506		Y4	591-594	
	G6	506-509		Y5	594-597	
	<b>PURE GREEN</b>	G7	509-512	<b>YELLOW ORANGE</b>	YO1	597-600
		G8	512-515		YO2	600-603
G9		515-518	<b>PURE ORANGE</b>	YO3	603-606	
G10		518-521		YO4	606-609	
G11		521-524		<b>RED</b>	O1	609-612
G12		524-527	O2		612-615	
G13		527-530	O3		615-618	
G14		530-533	R1		618-621	
G15		533-536	R2		621-624	
G16		536-539	R3		624-627	
G17		539-542	R4	627-630		
G18	542-545	R5	630-633			
G19	545-548	R6	633-636			

## FORWARD VOLTAGE (VF) BIN

Bin Code	VF (V)	Bin Code	VF (V)	Bin Code	VF (V)	Bin Code	VF (V)
V1	1.6-1.8	V5	2.4-2.6	V9	3.2-3.4	V13	4.0-4.2
V2	1.8-2.0	V6	2.6-2.8	V10	3.4-3.6	V14	4.2-4.4
V3	2.0-2.2	V7	2.8-3.0	V11	3.6-3.8	V15	4.4-4.6
V4	2.2-2.4	V8	3.0-3.2	V12	3.8-4.0	V16	4.6-4.8



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

Fig.1 正向电流 Vs. 正向电压

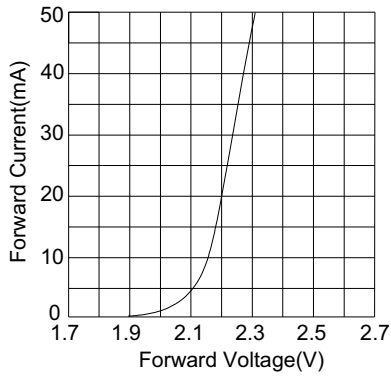


Fig.2 相对亮度 Vs. 正向电流

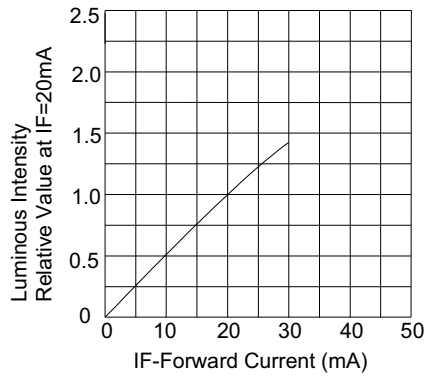


Fig.3 正向电流 Vs. 环境温度

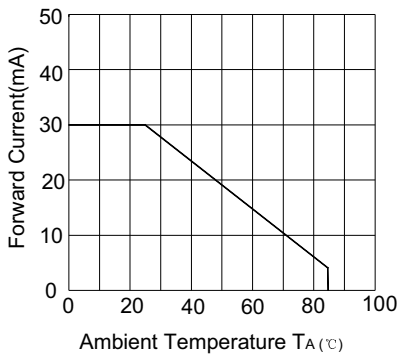


Fig.4 相对亮度 Vs. 环境温度

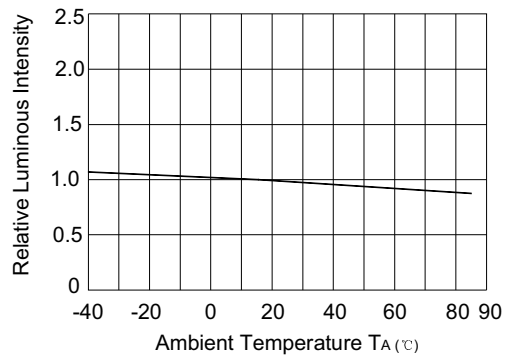


Fig.5 辐射强度 Vs. 波长

