



SUNSHINE ELECTRONICS TRADING LIMITED

Part No: SEL-P4-50SBWC90

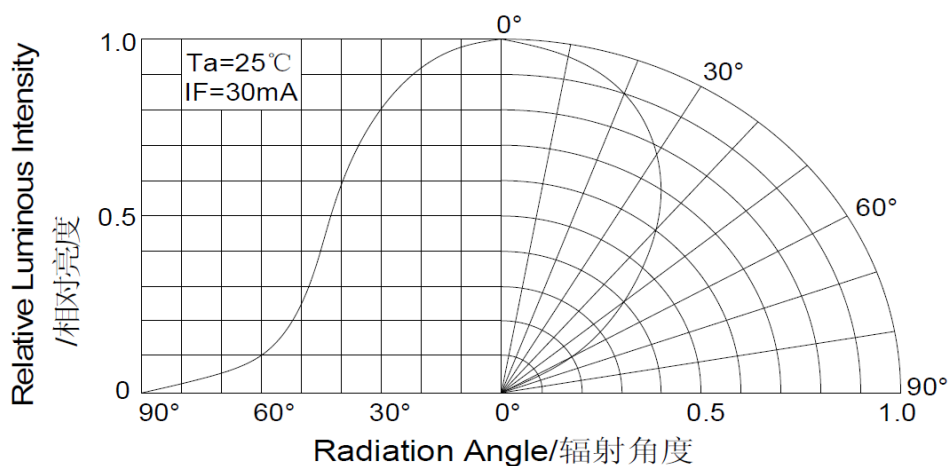
1. Features/特性:

- Emitting Color/发光颜色: White/白色
- High bright output/高亮度输出
- Low power consumption/低功耗
- High reliability and long life/可靠性高、寿命长
- RoHS compliant/符合 RoHS 标准

2. Descriptions/描述:

- Dice material/芯片材质: InGaN
- Lead material/支架材质: Cu
- Emitting Color/发光颜色: Super Bright White/高亮度白光
- Device Outline/产品外形: 7.62mmX7.62mm
- Lens Type/胶体颜色: Water Clear/无色透明

3. Directivity/指向特性: ($T_a=25^{\circ}\text{C}$, $I_F=30\text{mA}$)

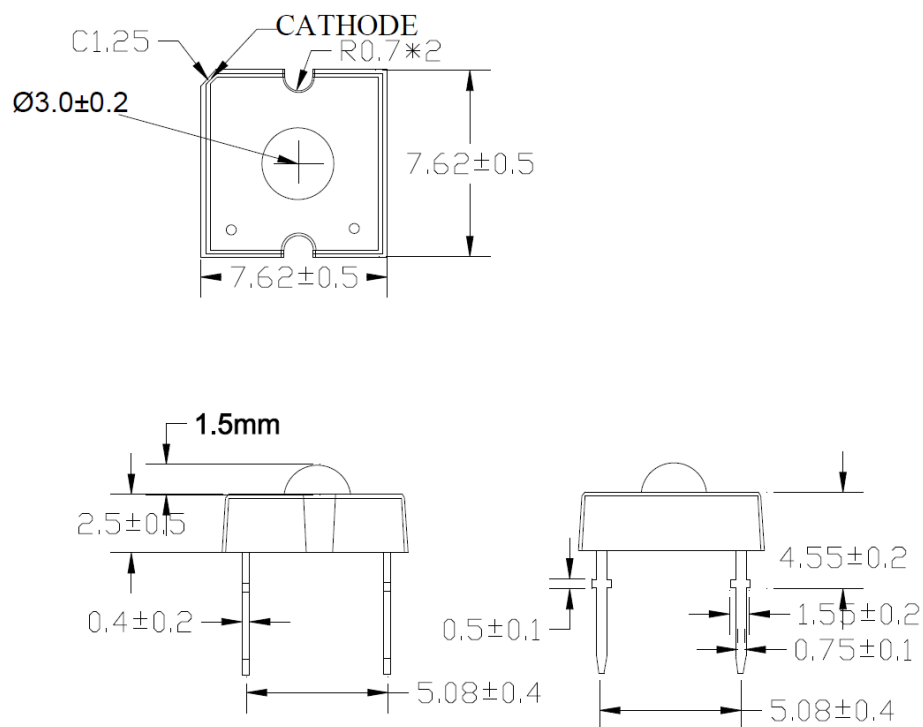




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4. Outline Dimensions/产品外形尺寸:



1. All dimensions are millimeters/单位: mm.
2. Tolerance is ± 0.20 mm unless otherwise noted/
没有标注的公差均为 ± 0.20 mm.



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5. Absolute maximum ratings/极限参数 (Ta = 25°C)

Parameter 参数	Symbol 符号	Test Condition 测试条件	Value 数值		Unit 单位
			Min.	Max.	
Reverse Voltage 反向电压	VR	IR = 30 μ A	5	----	V
Forward Current 正向工作电流	IF	----	----	50	mA
Power Dissipation 损耗功率	Pd	----	----	190	mW
Pulse Current 正向峰值电流	Ipeak	Duty=0.1mS, 1kHz	----	150	mA
Operating Temperature 工作温度范围	Topr	----	-40	+85	°C
Storage Temperature 储存温度范围	Tstr	----	-40	+100	°C

6. Electrical and optical characteristics/光电参数 (Ta = 25°C)

Parameter 参数	Symbol 符号	Test Condition 测试条件	Value 数值			Unit 单位
			Min.	Typ.	Max.	
Forward Voltage 正向电压	VF	IF = 50mA	----	3.2	3.6	V
Reverse Current 反向电流	IR	VR = 5V	----	----	10	μ A
Luminous Flux 光通量	ϕ	IF = 50mA	----	19	----	Lm
Viewing Angle 指向角度	2 θ 1/2	IF = 50mA	----	90	----	Deg.

Notes/备注: Tolerance 误差: VF: $\pm 0.10V$, ϕ : $\pm 15\%$, 其它: $\pm 5\%$

7. Luminous Flux Bins Chart/亮度等级 (Ta = 25°C)

Bin	AF	AG	AH
Min	13	17	22
Max	17	22	28

Notes/备注: Rank error/分档误差: ϕ : $\pm 15\%$



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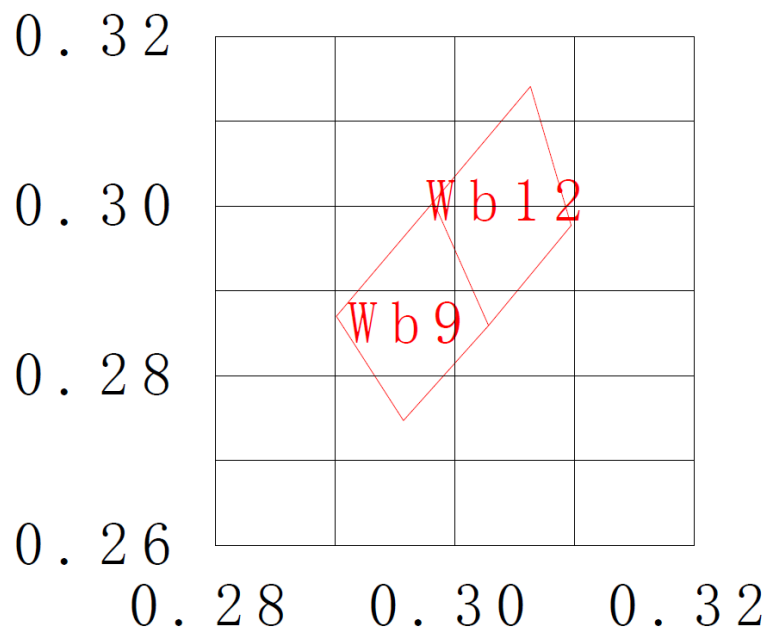
Part No: SEL-P4-50SBWC90

8. Chromaticity Coordinates Ranks /色坐标等级 (IF=30mA Ta=25°C)

色坐标误差: ± 0.01

Wb9	X	0.2901	0.2982	0.3028	0.2957
	Y	0.2870	0.3005	0.2859	0.2747
Wb12	X	0.2982	0.3063	0.3097	0.3028
	Y	0.3005	0.3141	0.2977	0.2859

9. CIE 1931 Chromaticity diagram/CIE1931 图 (IF=30mA Ta=25°C)





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

Fig.1 正向电流 Vs. 正向电压

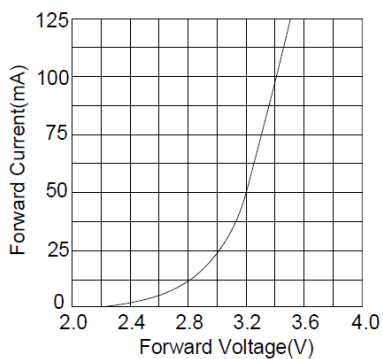


Fig.2 相对亮度 Vs. 正向电流

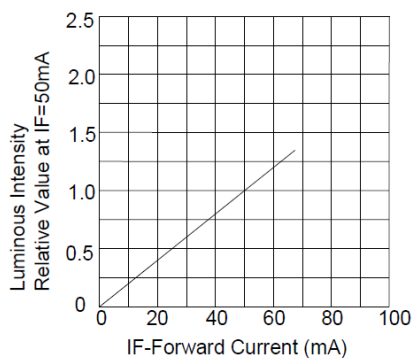


Fig.3 正向电流 Vs. 环境温度

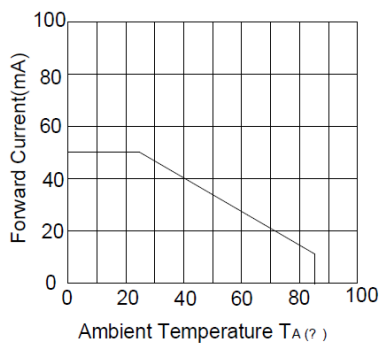


Fig.4 相对亮度 Vs. 环境温度

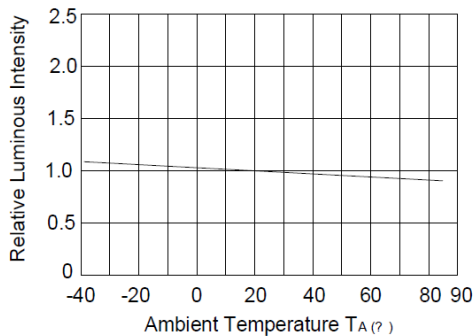


Fig.5 相对亮度 Vs 波长

