



Part No./型号: 130PWC



**ATTENTION**

OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
DISCHARGE  
SENSITIVE  
DEVICES

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

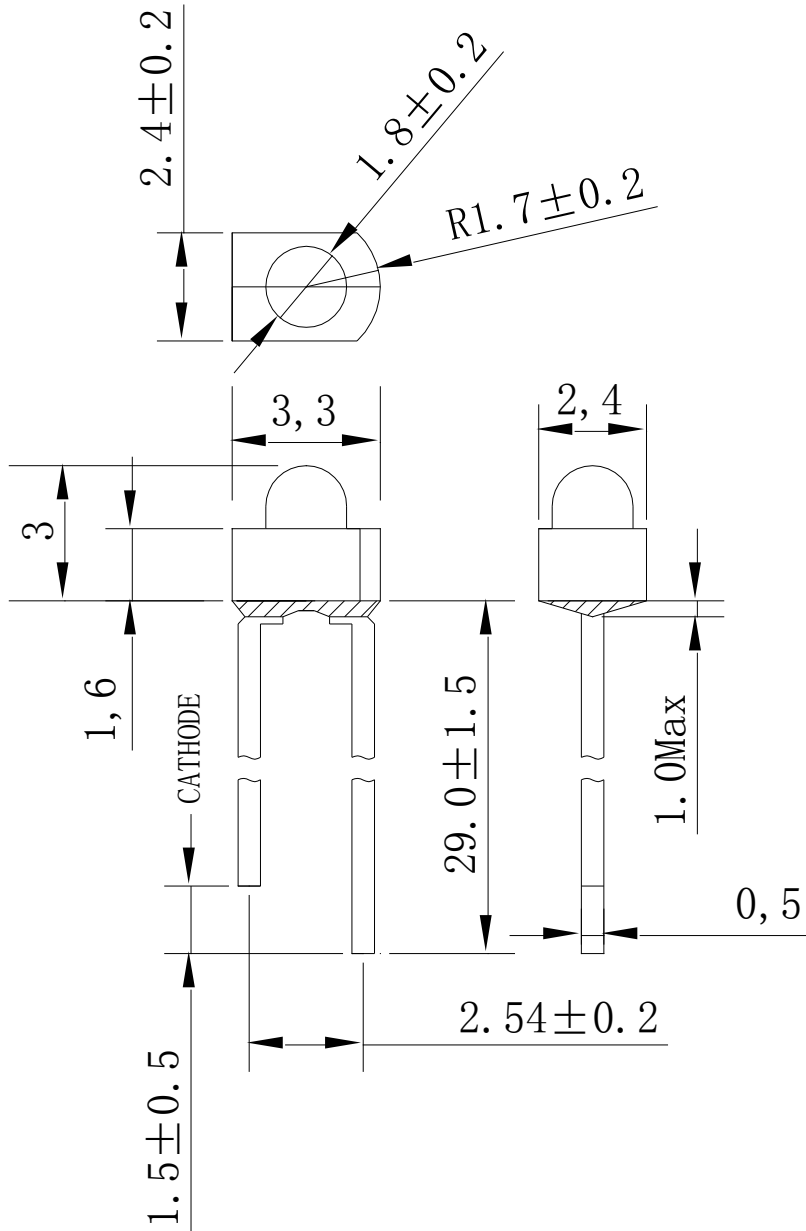
2. Descriptions/描述:

- Dice material/芯片材质: InGaN
- Emitting Color/发光颜色: Super Bright White/高亮度白光
- Device Outline/产品外形: Special Type/ 特殊形状
- Lens Type/胶体颜色: Water Clear/无色透明



Part No./型号: 130PWC

3. Outline Dimensions/产品外形尺寸:



- All dimensions are millimeters/单位: mm
- Tolerance is +/-0.25mm unless otherwise noted/  
没有标注的公差为  $\pm 0.25$  mm



Part No./型号: 130PWC

4. 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	V <sub>R</sub>	I <sub>R</sub> = 30 μA	5	--	V
Forward Current 正向工作电流	I <sub>F</sub>	----	----	25	mA
Power Dissipation 损耗功率	P <sub>d</sub>	----	----	90	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>	----	-25	+85	°C
Storage Temperature 储存温度范围	T <sub>str</sub>	----	-40	+100	°C

5. 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	V <sub>F</sub>	I <sub>F</sub> = 20mA		3.2	3.6	V
Reverse Current 反向电流	I <sub>R</sub>	V <sub>R</sub> = 5V	----	----	30	μA
Luminous Intensity 发光强度	I <sub>V</sub>	I <sub>F</sub> = 20mA	----	2000	----	mcd
	Φ	I <sub>F</sub> = 20mA	----	6	----	lm

Notes/备注: Tolerance 误差: V<sub>F</sub>: ±0.10V, I<sub>V</sub>: ±15%, 其它: ±5%

出货分档以发光强度为标准, 光通量值仅供参考

6. Luminous Intensity Bins Chart/亮度等级 (Ta = 25°C)

Bin	T	U	V	W
Min	1000	1500	2000	3000
Max	1500	2000	3000	4000

Notes/备注: Rank error/分档误差: I<sub>V</sub>: ±15%



Part No./型号: 130PWC

7. Chromaticity Coordinates Ranks / 色坐标等级 (IF=20mA Ta=25°C)

色坐标误差: ±0.01

代码	轴	参数				代码	轴	参数			
Wa1	X	0.2217	0.2301	0.2389	0.2309	Wa2	X	0.2309	0.2389	0.2476	0.2399
	Y	0.2114	0.2271	0.2209	0.2065		Y	0.2065	0.2209	0.2147	0.2018
Wa3	X	0.2399	0.2476	0.2567	0.2496	Wa4	X	0.2301	0.2386	0.2469	0.2389
	Y	0.2018	0.2147	0.2083	0.1967		Y	0.2271	0.2428	0.2352	0.2209
Wa5	X	0.2389	0.2469	0.2553	0.2476	Wa6	X	0.2476	0.2553	0.2636	0.2567
	Y	0.2209	0.2352	0.2276	0.2147		Y	0.2147	0.2276	0.2201	0.2083
Wa7	X	0.2387	0.2491	0.2571	0.2469	Wa8	X	0.2469	0.2571	0.2651	0.2553
	Y	0.2427	0.2619	0.2531	0.2352		Y	0.2352	0.2531	0.2443	0.2276
Wa9	X	0.2553	0.2651	0.2731	0.2637	Wa10	X	0.2491	0.2596	0.2672	0.2571
	Y	0.2276	0.2443	0.2355	0.2200		Y	0.2619	0.2811	0.2711	0.2531
Wa11	X	0.2571	0.2672	0.2748	0.2651	Wa12	X	0.2651	0.2748	0.2824	0.2731
	Y	0.2531	0.2711	0.2610	0.2443		Y	0.2443	0.2610	0.2510	0.2355
Wb1	X	0.2596	0.2693	0.2759	0.2672	Wb2	X	0.2672	0.2759	0.2825	0.2748
	Y	0.2811	0.2974	0.2857	0.2711		Y	0.2711	0.2857	0.2740	0.2610
Wb3	X	0.2748	0.2825	0.2890	0.2824	Wb4	X	0.2693	0.2791	0.2846	0.2759
	Y	0.2610	0.2740	0.2623	0.2510		Y	0.2974	0.3138	0.3004	0.2857
Wb5	X	0.2759	0.2846	0.2901	0.2825	Wb6	X	0.2825	0.2901	0.2957	0.2890
	Y	0.2857	0.3004	0.2870	0.2740		Y	0.2740	0.2870	0.2737	0.2623
Wb7	X	0.2791	0.2899	0.2940	0.2846	Wb8	X	0.2846	0.2940	0.2981	0.2901
	Y	0.3138	0.3268	0.3138	0.3004		Y	0.3004	0.3138	0.3007	0.2870
Wb9	X	0.2901	0.2981	0.3032	0.2957	Wb10	X	0.2899	0.3008	0.3035	0.2940
	Y	0.2870	0.3007	0.2845	0.2737		Y	0.3268	0.3398	0.3272	0.3138
Wb11	X	0.2940	0.3035	0.3062	0.2981	Wb12	X	0.2981	0.3062	0.3103	0.3032
	Y	0.3138	0.3272	0.3144	0.3007		Y	0.3007	0.3144	0.2947	0.2845
Wc1	X	0.3008	0.3197	0.3205	0.3028	Wc2	X	0.3028	0.3205	0.3214	0.3048
	Y	0.3398	0.3589	0.3481	0.3304		Y	0.3304	0.3481	0.3352	0.3209
Wc3	X	0.3048	0.3214	0.3221	0.3068	Wc4	X	0.3068	0.3221	0.3229	0.3103
	Y	0.3209	0.3352	0.3261	0.3113		Y	0.3113	0.3261	0.3130	0.2947
Wc5	X	0.3197	0.3381	0.3376	0.3206	Wc6	X	0.3206	0.3376	0.3371	0.3214
	Y	0.3589	0.3740	0.3616	0.3461		Y	0.3461	0.3616	0.3493	0.3352
Wc7	X	0.3214	0.3371	0.3366	0.3222	Wc8	X	0.3222	0.3366	0.3361	0.3229
	Y	0.3352	0.3493	0.3369	0.3243		Y	0.3243	0.3369	0.3241	0.3130
Wd1	X	0.3381	0.3475	0.3463	0.3376	Wd2	X	0.3376	0.3463	0.3452	0.3371
	Y	0.3740	0.3817	0.3687	0.3616		Y	0.3616	0.3687	0.3558	0.3493
Wd3	X	0.3371	0.3452	0.3440	0.3366	Wd4	X	0.3366	0.3440	0.3427	0.3361
	Y	0.3493	0.3558	0.3428	0.3369		Y	0.3369	0.3428	0.3284	0.3241

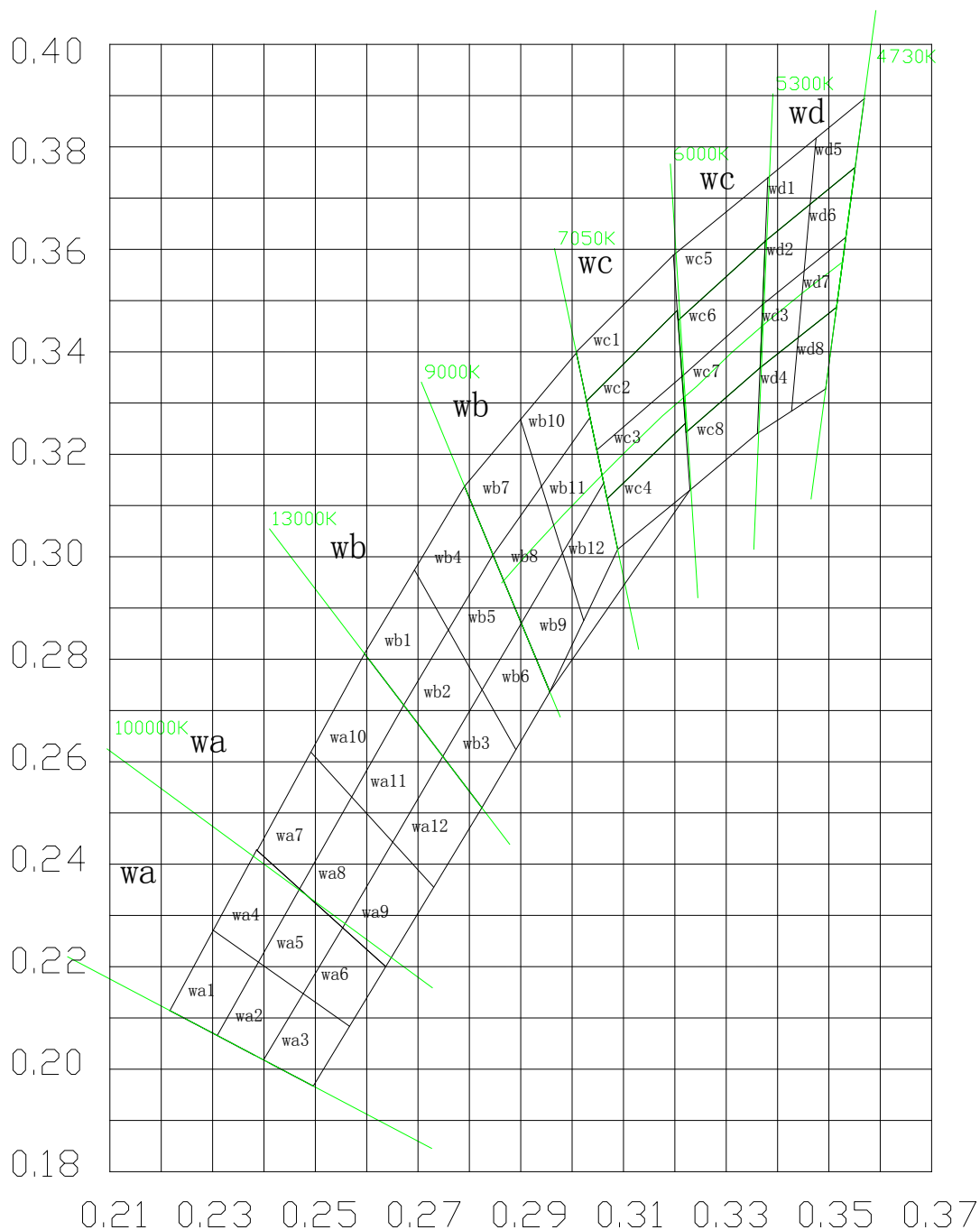


# LED SPECIFICATION

Part No./型号: 130PWC

Wd5	X	0.3475	0.3569	0.3551	0.3463	Wd6	X	0.3463	0.3551	0.3533	0.3452
	Y	0.3817	0.3894	0.3760	0.3687		Y	0.3687	0.3760	0.3624	0.3558
Wd7	X	0.3452	0.3533	0.3515	0.3440	Wd8	X	0.3440	0.3515	0.3494	0.3427
	Y	0.3558	0.3624	0.3487	0.3428		Y	0.3428	0.3487	0.3328	0.3284

## 8. CIE 1931 Chromaticity diagram/CIE1931 图 (IF=20mA Ta=25°C)





Part No./型号: 130PWC

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

Fig.1 正向电流 Vs. 正向电压

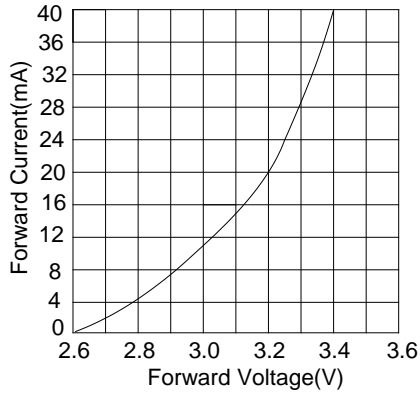


Fig.2 相对亮度 Vs. 正向电流

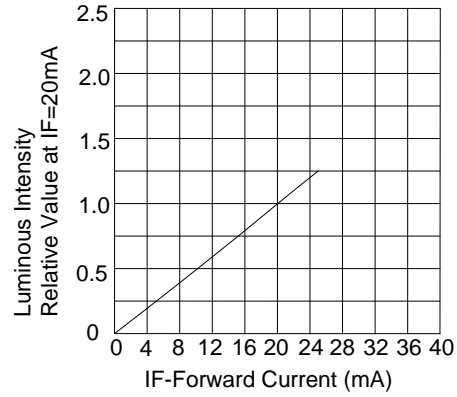


Fig.3 正向电流 Vs. 环境温度

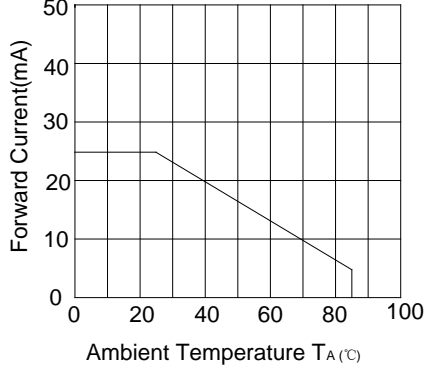


Fig.4 相对亮度 Vs. 环境温度

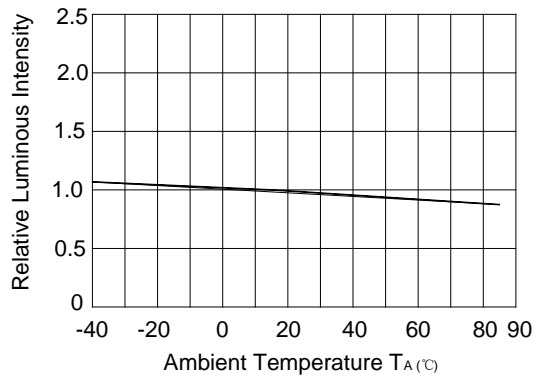


Fig.5 相对亮度 Vs. 波长

