



SUNSHINE ELECTRONICS TRADING LIMITED

Part No: SEL-2835-PRP-3V300

1. Features:

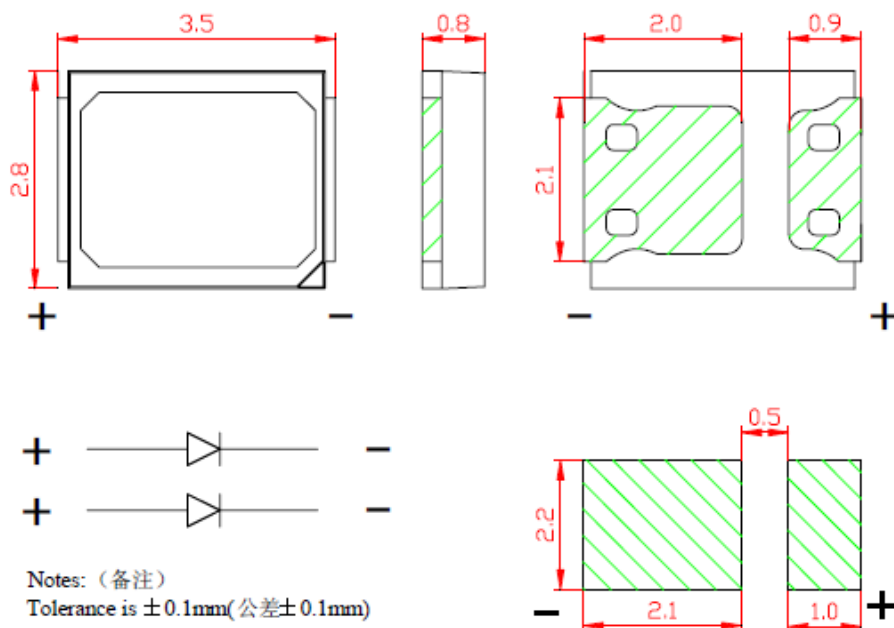
- Emitting Color: Purple
- Lens Type: Water Clear
- Device Outline: 3.5×2.8×0.8 (unit: mm)
- HBM ESD: Class 2
- Pb-Free
- RoHS compliant: RoHS



2. Applications:

- Grow Light
- Special Lighting for Food

3. Outline Dimensions:





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4. Absolute maximum ratings (Ta=25℃):

Parameter	Symbol	Value	Unit
Power Dissipation	Pd	1000	mW
Reverse Voltage	VR	7	V
Pulse Current ^[1]	IFp	400	mA
Forward Current	IFm	300	mA
Operating Temperature	Topr	- 40 ~ +85	℃
Storage Temperature	Tstr	- 40 ~ +100	℃
Junction Temperature	Tj	115	℃

Notes: [1] 0.1ms pulse width, 1/10 Duty

5. Electrical and optical characteristics (Ta=25℃):

Parameter	Symbol	Test Condition	Value			Unit
			Min.	Typ.	Max.	
Forward Voltage	VF	IF = 300mA	—	3.2	3.6	V
Reverse Current	IR	VR = 7V	—	—	30	μA
Dominate Wavelength	λd`	IF = 300mA	—	610	—	nm
Peak Wavelength	λp	IF = 300mA	—	658	—	nm
Spectral Half Bandwidth	Δλ	IF = 300mA	—	15	—	nm
Luminous Flux	Iv	IF = 300mA	18	21	—	Lm
Viewing Angle	2θ1/2	IF = 300mA	—	120	—	Deg.
Red Blue Ratio		IF = 300mA	—	4.8819	—	
PPF in PAR (400 to 700nm)		IF = 300mA	—	1.08	—	μmol/s
PPF/W		IF = 300mA	—	1.127	—	μmol/J
Thermal Resistance	Rthj-s	IF = 300mA	—	30	—	℃/w

Notes: Tolerance: VF: ±0.10V, Iv: ±15%, 其它: ±5%



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6、Product Ranks/产品分档范围:

Luminous Flux /光通量 (lm)

(Ta=25℃)

Rank	L18	L20
Iv	18-20	20-22

Wavelength / 波长 (nm)

(Ta=25℃)

Rank	YO4	O1	O2
WLD	606-609	609-612	612-615

Voltage / 电压 (V)

(Ta=25℃)

Rank	N	P	Q	R	S	T	U	V
Vf	2.8-2.9	2.9-3.0	3.0-3.1	3.1-3.2	3.2-3.3	3.3-3.4	3.4-3.5	3.5-3.6

Notes/备注: Rank error/分档误差: Iv: $\pm 15\%$, λd : $\pm 1\text{nm}$, Vf: $\pm 0.10\text{v}$



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7. Typical electrical/optical characteristic curves:

Fig.1 正向电流 Vs. 正向电压

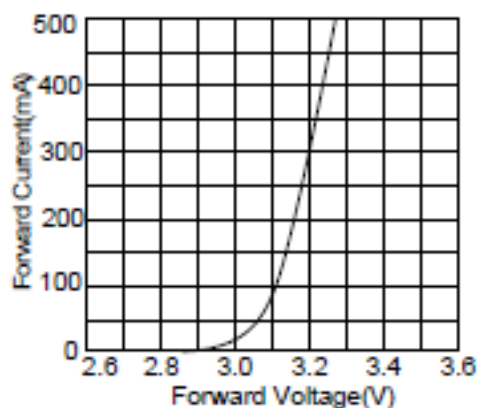


Fig.2 相对亮度 Vs. 正向电流

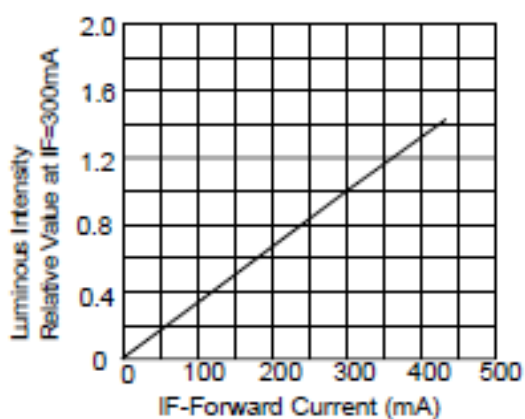
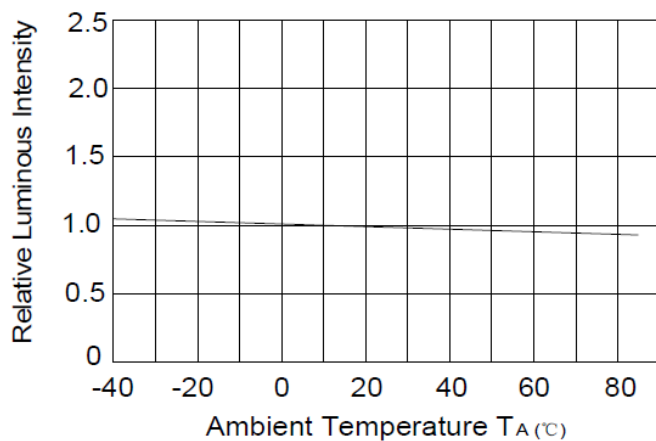
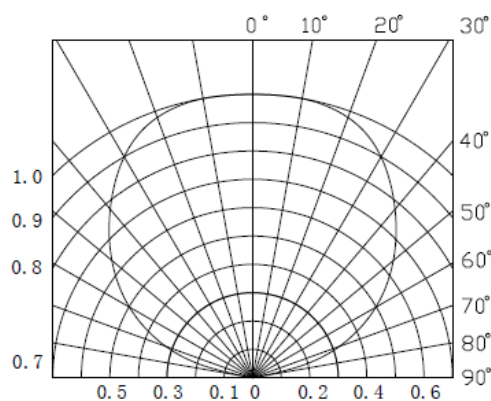


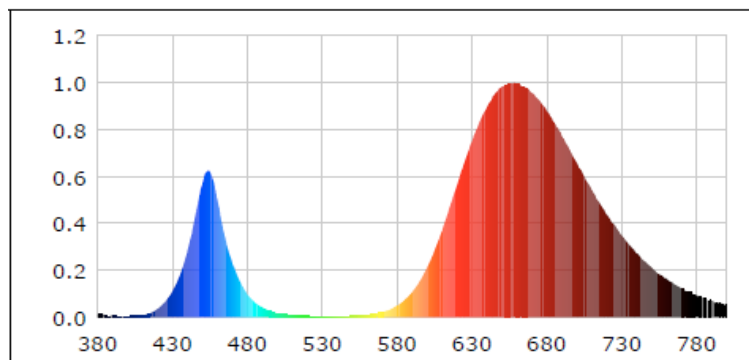
Fig.4 相对亮度 Vs. 环境温度



SPATIAL DISTRIBUTION



SPECTRAL DISTRIBUTION





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8、Relibility Analysis/可靠性试验

8.1 Test Items And Results/测试项目和判据

No.	Item/项目	Test Condition/测试条件	Spec. / 引用标准	Q'ty/ 数量	Time/ 时间	Standard/ 判定
1	IR Reflow (Reflow Soldering) 回流焊接	Tsld=260℃ T=10sec	JESD22-B106	20	3times	ALL PASS
2	Solder ability 可焊性	Tsld=235±5℃, 3sec	JESD22-B102	20	1times Over 95%	ALL PASS
3	Temperature Cycle 高低温循环	100℃ 30mins ↑ ↓ 5mins -40℃ 30mins	JESD22-A104	20	100cycles	ALL PASS
4	High Temperature High Humidity 高温高湿	85℃/85%RH	JESD22-A118	20	168hrs	ALL PASS
5	High Temperature Storage 高温储存	Ta=100℃ (-0/+10℃)	JESD22-A103	20	1000hrs	ALL PASS
6	Low Temperature Storage 低温储存	Ta=-40℃ (-10℃ /+0)	JESD22-A119	20	1000hrs	ALL PASS
7	Steady State perating Life 电耐久性	Ta=25℃ ± 5℃ IF=300mA	JESD22-A108	20	1000hrs	ALL PASS

8.2 Criteria For Judging Damage/判断标准

Item/项目	Symbol/ 符号	Test conditions /测试条件	Criteria for Judgement /判断标准	
			Min./最小值	Max./最大值
Luminous Intensity/亮度	Iv	IF=300mA	L.S.L *0.7	/
Forward Voltage/正向电压	VF	IF=300mA	/	U.S.L*1.1
Reverse current/反向电流	IR	VR=7v	/	U.S.L*2

*U.S.L.: Upper Standard Level / 上限

*L.S.L.: Lower Standard Level / 下限



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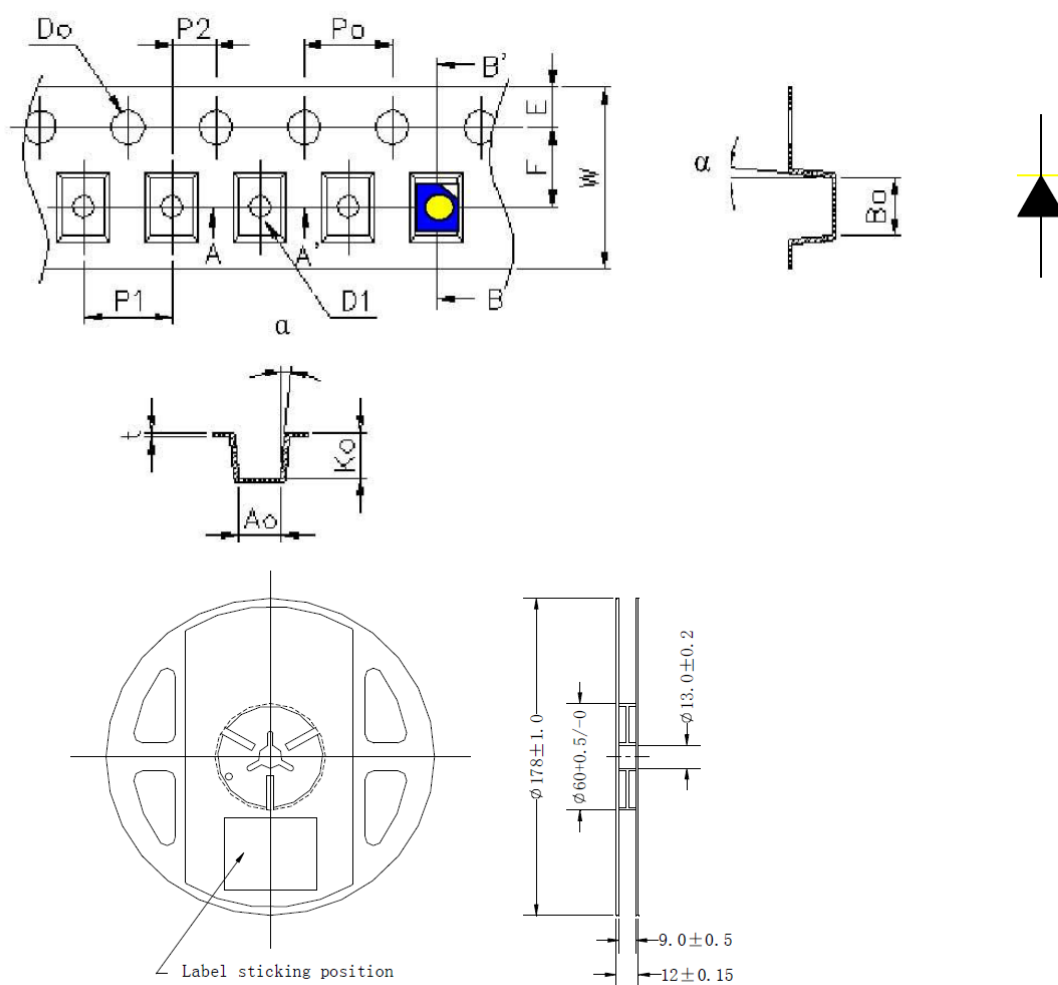
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9、Specification of Packing /包装规格

9.1 Taping and Orientation/编带和方向

Quantity/数量 : 3000 units/reel

Diameter/直径 : 178 mm



Item/项目	Spec/数值	Tol.(+/-)/误差	Item/项目	Spec/数值	Tol.(+/-)/误差
W	8.00	±0.10	P2	2.00	±0.05
E	1.75	±0.10	T	0.20	±0.02
F	3.50	±0.010	A0	3.00	±0.10
D0	1.55	±0.05	B0	3.75	±0.10
D1	1.10	±0.1	K0	1.25	±0.10
P0	4.00	±0.1	α	Max 5°	