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Technical Data Sheet

MODEL NO : S6565UV4-395

6565 Package 6.5*6.5mm SMD LEDs

Features :

- Compatible with automatic placement equipment
- Compatible with reflow solder process

Applications :

- Indicators
- Automotive : backlighting in dashboard and switch
- Backlight for LCD

Dice material	Emitted color	Lens Color
InGaN	UV	Water Clear

Electrical/Optical Characteristics(Ta=25°C)

Parameter	Test Condition	Symbol	Value			Unit
			Min	Typ	Max	
Dominant wavelength	I _F =1000mA	λ_D	390	395	400	nm
Forward voltage	I _F =1000mA	V _F	13.6	14.4	16	V
Luminous intensity	I _F =1000mA	ϕ_e	7000	7700	8000	mW
Viewing angle at 50% I _v	I _F =1000mA	2 θ 1/2		60		Deg
Reverse current	V _R =5V	I _R			10	μ A

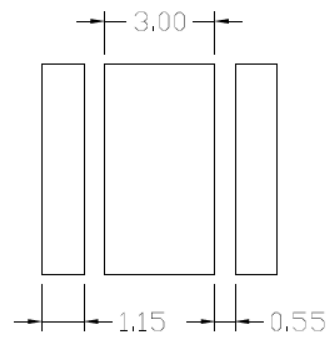
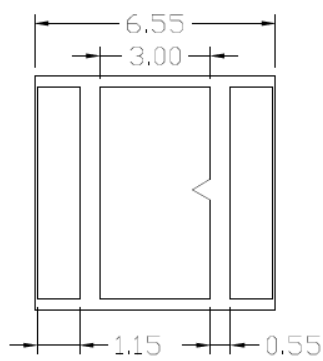
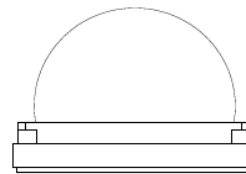
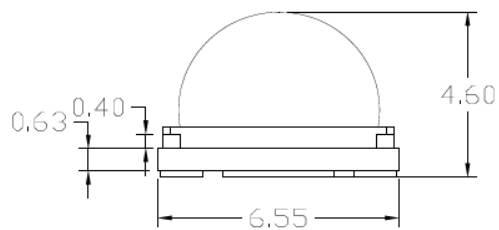
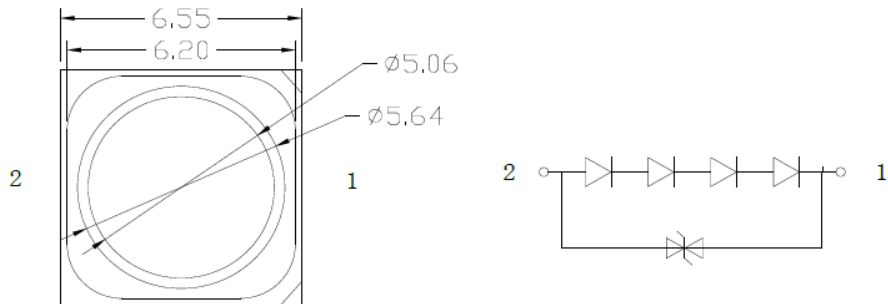
Absolute Maximum Ratings(Ta=25°C)

Parameter	Symbol	Value	Unit
Power dissipation	P _d	14	W
Forward current	I _F	700/1000	mA
Reverse voltage	V _R	20	V
Operating temperature range	Top	-40 ~+85	°C
Storage temperature range	Tstg	-40 ~+100	°C
Peak pulsing current (1/10 duty f=1kHz)	I _{FP}	1000	mA



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PACKAGING DIMENSIONS (mm):



Soldering Patterns

Notes: All dimensions are in millimeters (inches) ;

Tolerances are $\pm 0.2\text{mm}$ (0.008inch) unless otherwise noted



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(Optical-Electrical Characteristic)

Fig.1- Spectrum Distribution 光谱分布特性曲线

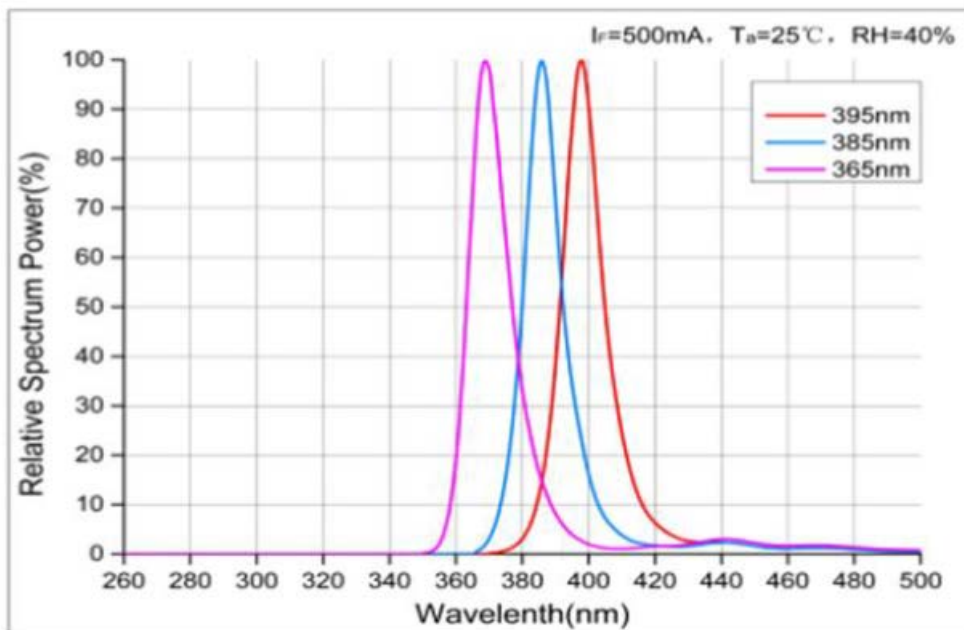
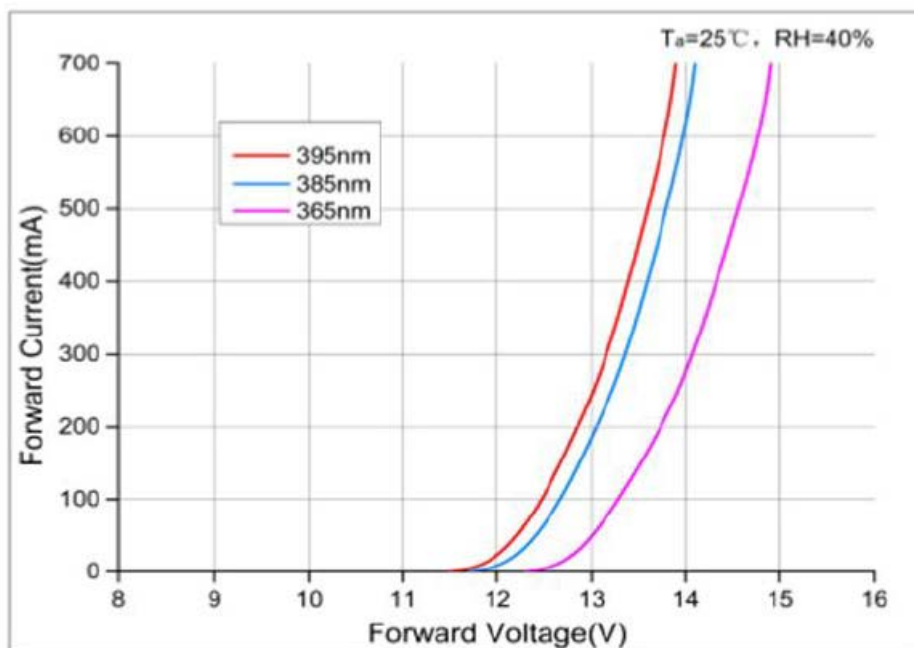


Fig.2- Forward Voltage Vs. Forward Current Intensity 伏安特性曲线





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Fig.3- Forward Current Vs. Relative Power 正向电流与相对光功率特性曲线

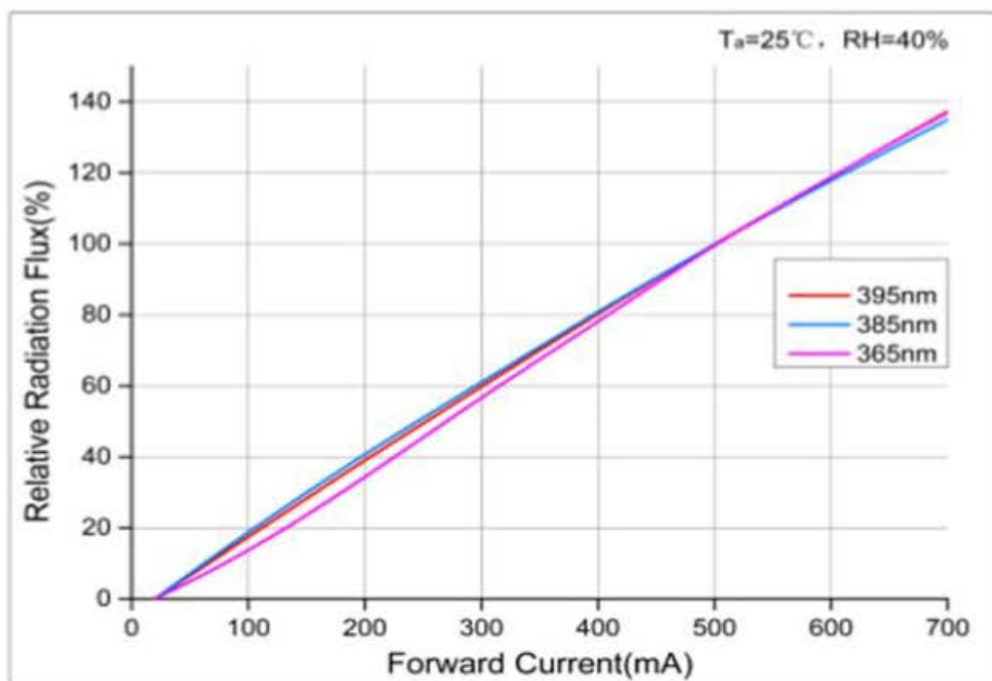
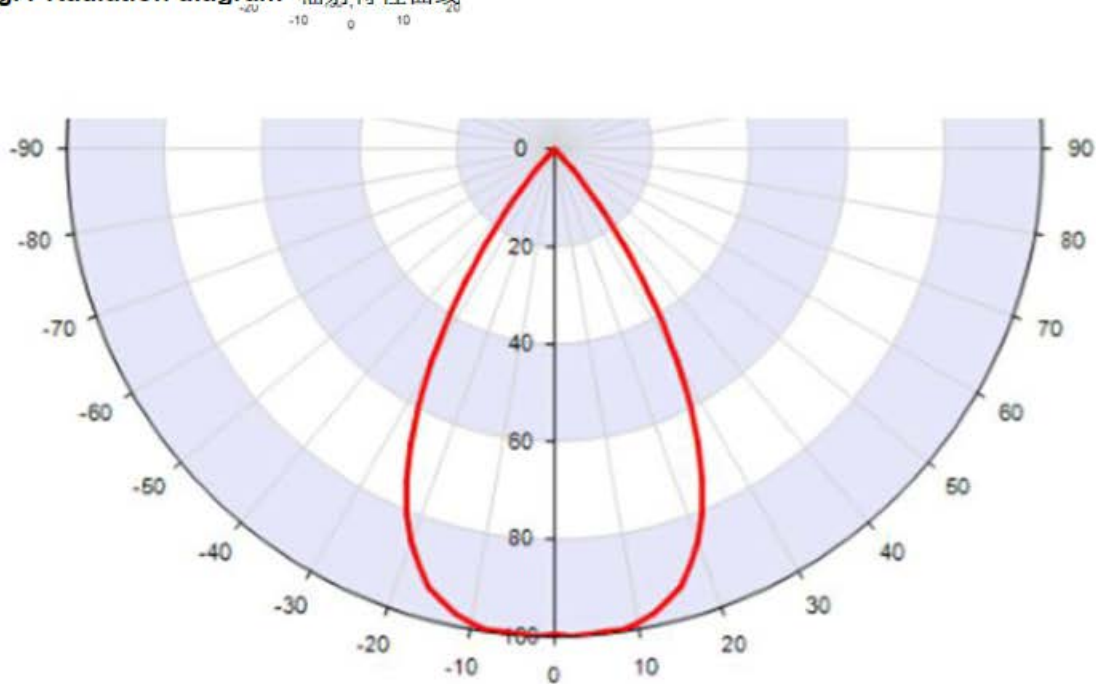


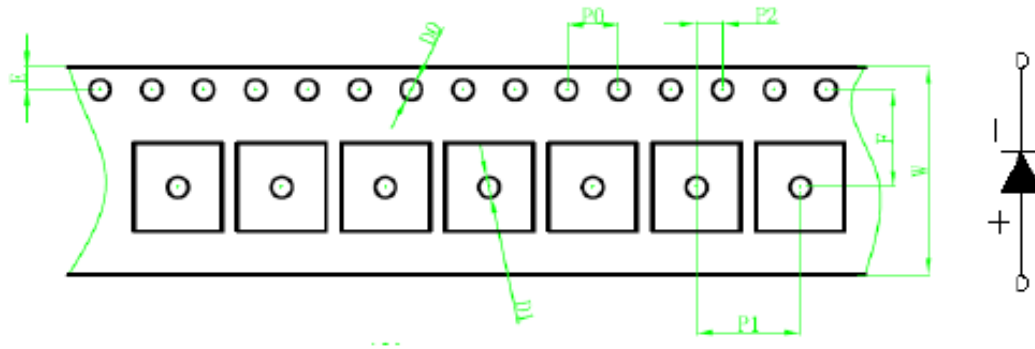
Fig.4-Radiation diagram 辐射特性曲线



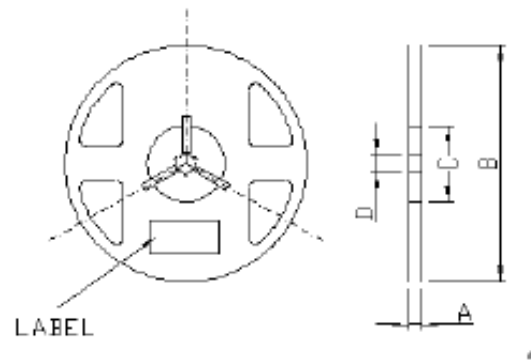


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■ Tape Dimensions 载体尺寸



■ Reel Dimensions 卷盘尺寸



Note: 注意

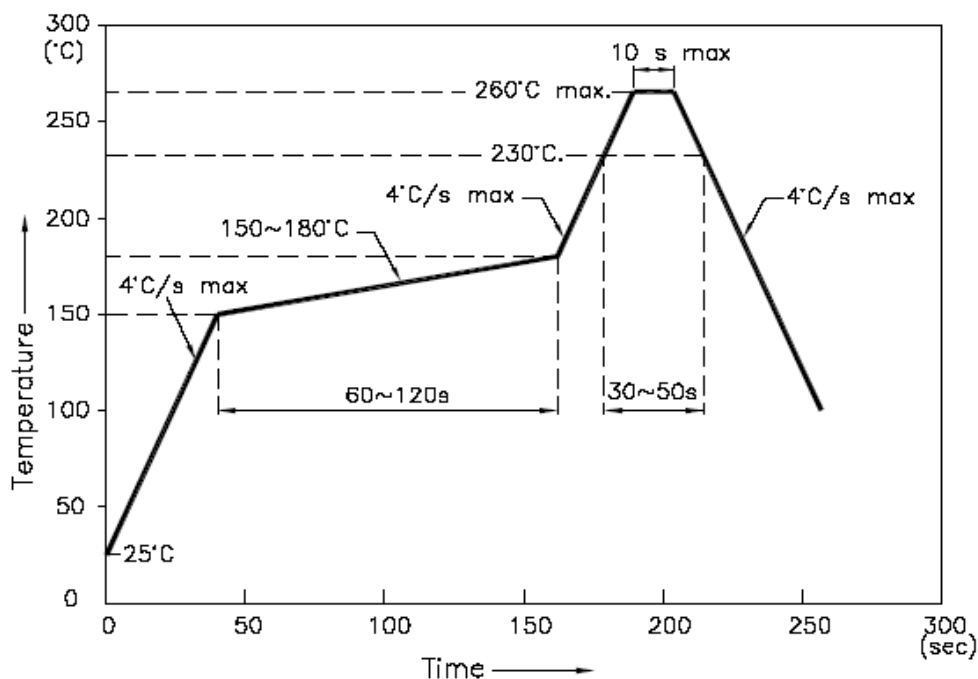
The tolerances unless mentioned $\pm 0.1\text{mm}$. Unit : mm 注: 标注公差为 ± 0.1 毫米, 尺寸单位: 毫米。



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Precautions For Use :
Over - current - proof
Customer must apply resistors for protection, otherwise slight voltage shift will cause big current change (Burn out will happen)
Storage
1. The operation of temperature and R.H. are : $5^{\circ}\text{C} \sim 30^{\circ}\text{C}$, 60%R.H. Max.
2. Once the package is opened, the products should be used within a week. Otherwise, they should be kept in a dampproof box with desiccating regent. Considering the tape life, we suggest our customers to use our products within 1.5 year (from production date) .
3. It's recommended to bake before soldering when the package is unsealed after 72 hrs. The condition is : $60^{\circ}\text{C} \pm 5^{\circ}\text{C}$ for 15hrs.

■ Reflow Temp/Time



NOTES:

1. We recommend the reflow temperature $245^{\circ}\text{C} (\pm 5^{\circ}\text{C})$. the maximum soldering temperature should be limited to 260°C .
2. dont cause stress to the epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.



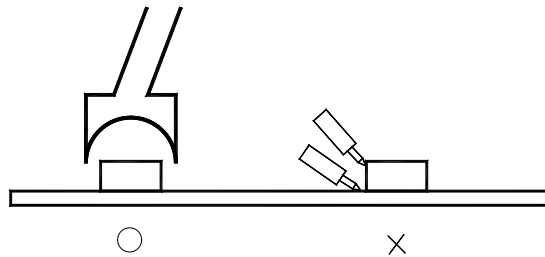
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■Soldering iron

Basic spec is $\leq 5\text{sec}$ when 260°C . If temperature is higher, time should be shorter ($+10^{\circ}\text{C} \rightarrow -1\text{sec}$). Power dissipation of iron should be smaller than 20W, and temperatures should be controllable. Surface temperature of the device should be under 230°C .

■Rework

1. Customer must finish rework within 5 sec under 260°C .
2. The head of iron can not touch copper foil
3. Twin-head type is preferred.



- **Avoid rubbing or scraping the resin by any object, during high temperature, for example reflow 、 solder etc.**