



YETDA INDUSTRY LTD.

Technical Data Sheet

MODEL NO : S3535UV4P-M-405nm

3535 Package 3.45*3.45*2.0mm Chip LEDs

Features :

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

Applications :

- UV Curing, UV Printing
- Security, Banknote
- Nail Polish Curing, Mosquito Killer

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	
Peak wavelength	I _F =350mA	λ_p	400		410	K
Forward voltage	I _F =350mA	V _F	2.8	.	3.8	V
Radiation Flux	I _F =350mA	Φ_e	500	580		mW
Radiation Flux	I _F =500mA	Φ_e	700	800	--	mW
Viewing angle at 50% I _v	I _F =350mA	2 θ 1/2	--	120	--	Deg
Reverse current	V _r =5V	I _R	--	□ -	10	μ A

Absolute Maximum Ratings(Ta=25°C)

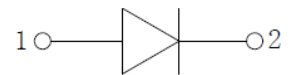
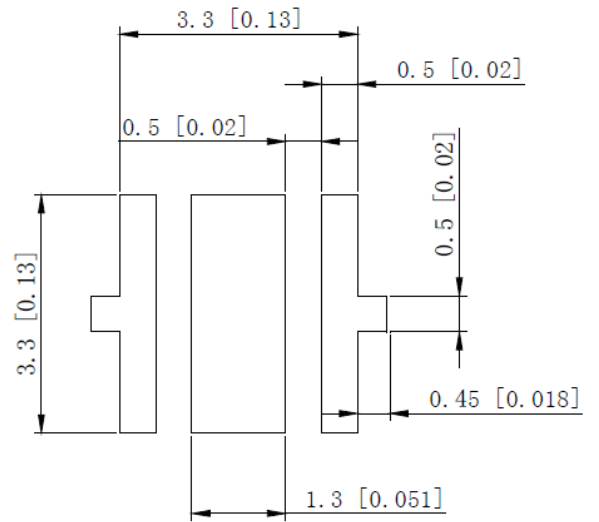
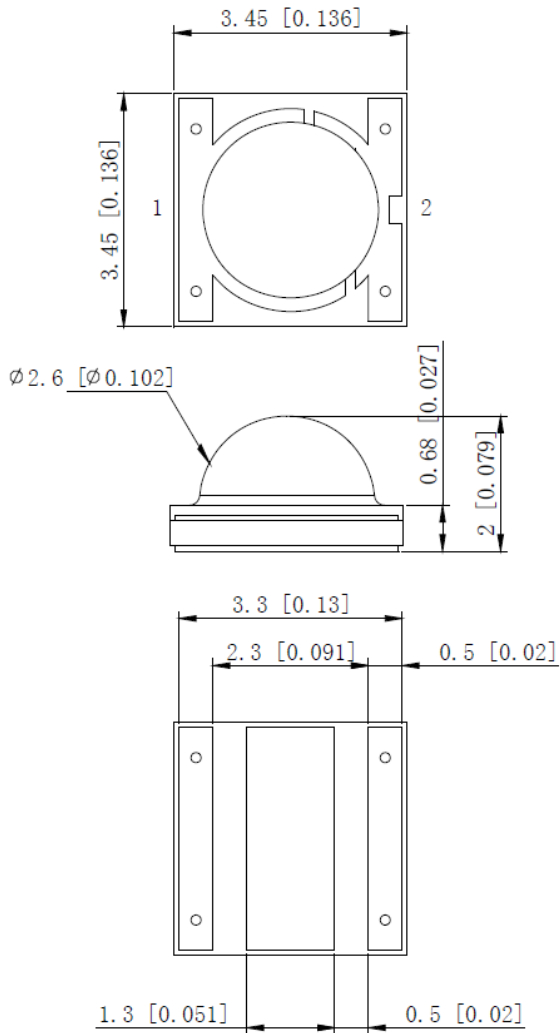
Parameter	Symbol	Value	Unit
Power dissipation	P _d	2.8	W
Forward current	I _F	550	mA
Reverse voltage	V _R	5	V
Operating temperature range	T _{op}	-40 ~+85	°C
Storage temperature range	T _{stg}	-40 ~+85	°C
Peak pulsing current (1/8 duty f=1kHz)	I _{FP}	700	mA

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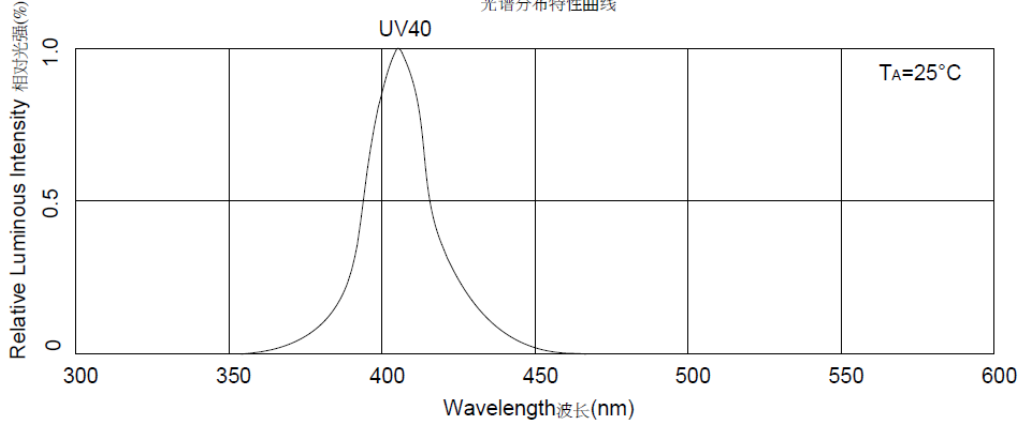
PACKAGING DIMENSIONS



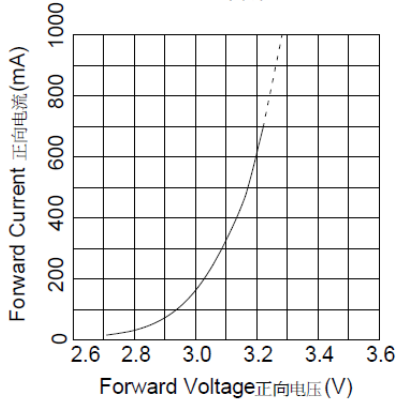


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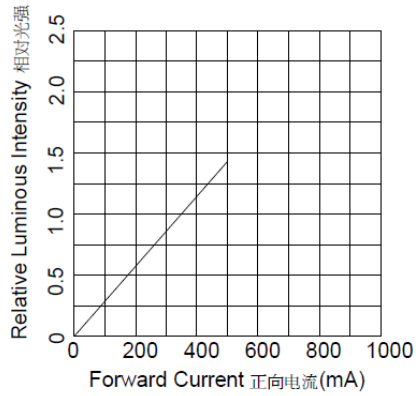
Relative Spectral Distribution
光谱分布特性曲线



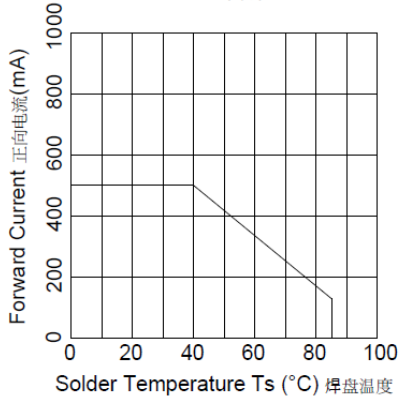
Volt-Ampere Characteristics
VF-IF曲线



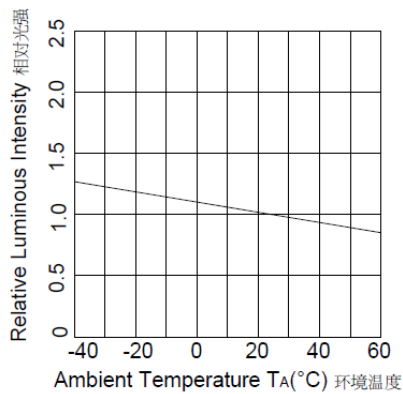
Forward Current VS. Relative Intensity
IF-IV曲线



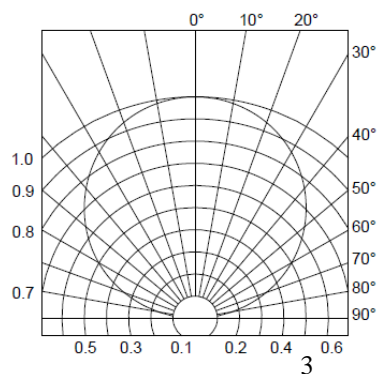
Soldering Temperature VS. Forward Current
Ts-IF曲线



Ambient Temperature VS. Relative Intensity
Ta-IV曲线



Radiation Diagram
辐射特性曲线





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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)

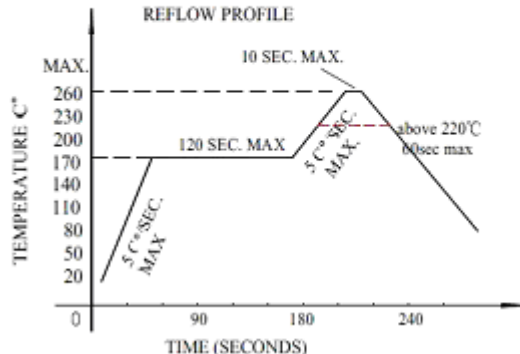
Storage

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

■ Temperature-profile (Surface of circuit board)

Use the following conditions shown in the figure.



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.

■ Soldering iron

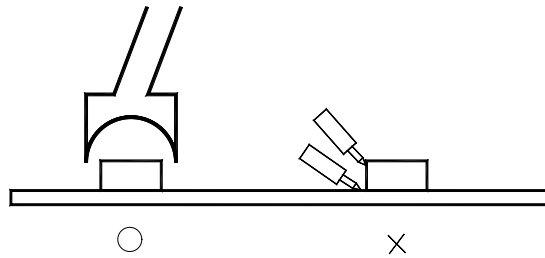
Basic spec is $\leq 5\text{sec}$ when 260°C . If temperature is higher, time should be shorter ($+10^{\circ}\text{C} \rightarrow -1\text{sec}$). Power dissipation of iron should be smaller than 20W, and temperatures should be controllable . Surface temperature of the device should be under 230°C .



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■ 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.

Dimensions of Tape (Unit: mm)

