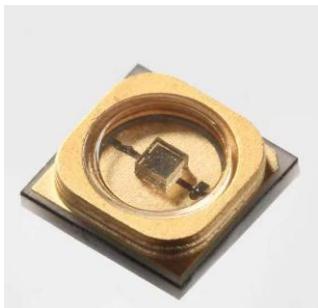




**Part No.: U3535C2VGB30**

## **Product picture**



## **Product introduction**

This series of deep uv packaging products are specially designed for applications with high radiation power and directivity requirements. The surface of the packaging body in the form of a patch device, and the use of special uv glass, so as to optimize the product life and performance. It can be used in plant lighting, fluorescence analyzer, medical testing, food and pharmaceutical processing, sterilization and other fields.

## **Features**

- ✧ Ceramic packaging
- ✧ Standard SMD process
- ✧ In line with the ROHS standard

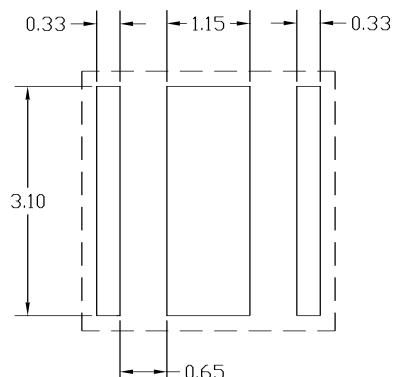
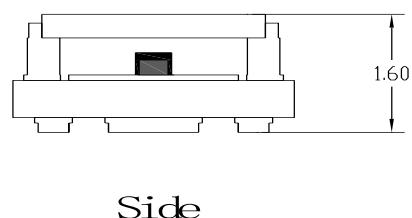
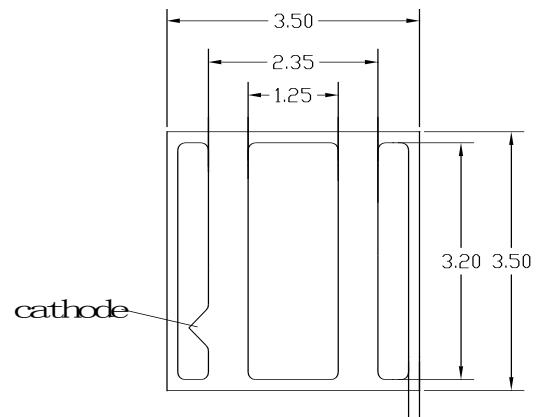
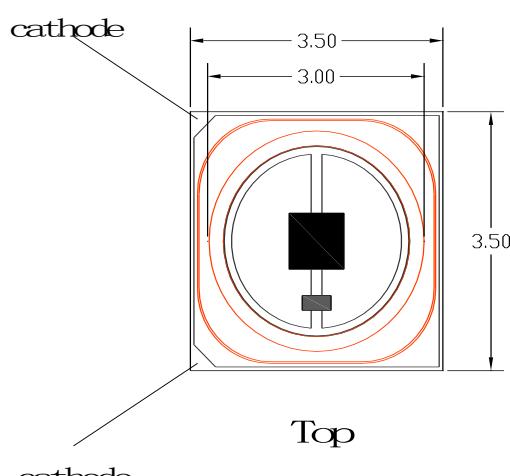
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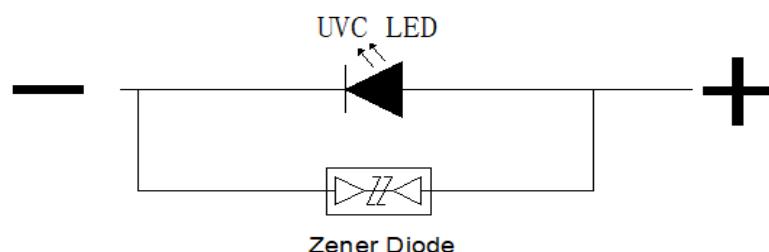


**Part No.: U3535C2VGB30**

**Outline dimensions: (Unit: mm, The tolerance  $\pm 0.1\text{mm}$ )**



Recommended Mask Size





**Part No.: U3535C2VGB30**

**Photoelectric properties (Ta = 25°C)**

Parameter	Forward current	Symbol	Min.	Typ	Max	Unit
The peak wavelength	If=150mA	λp	270	275	280	nm
Output Radiated power		P <sub>opt</sub>	--	20	--	mW
Forward Voltage		Vf	5	--	7.5	V
FWHM		Δ λ	--	9	--	nm
Viewing Angle		2θ <sub>1/2</sub>	--	120	--	°
Thermal resistance (T <sub>j</sub> -T <sub>sp</sub> )		R <sub>th</sub>	--	11	--	°C/W
Output Radiated power	If=300mA	P <sub>opt</sub>	--	30	--	mW

Instructions: T<sub>c</sub> = 25°C ; The tolerance of Forward voltage: ± 0.1V; The tolerance of Radiation flux: ± 8%; The tolerance of peak wavelength : ± 3nm.

**Limit service condition**

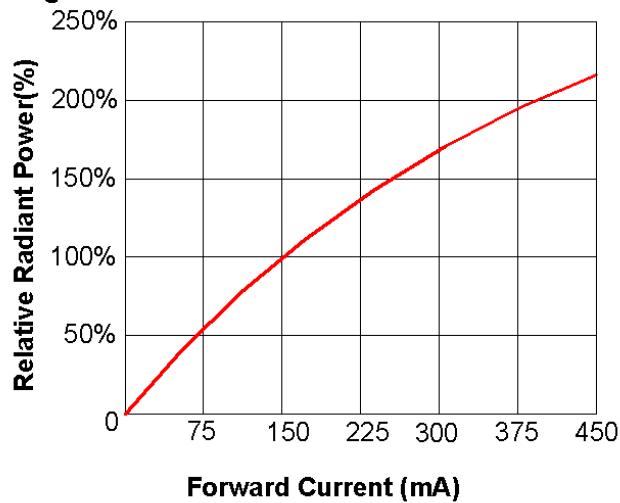
Parameter	Symbol	Unit	Range
Forward current	If	mA	≤ 300
Junction temperature	T <sub>j</sub>	°C	≤ 90
Working temperature	T <sub>opr</sub>	°C	-30-60
The welding conditions	T <sub>sol</sub>	-	260°C < 5 seconds



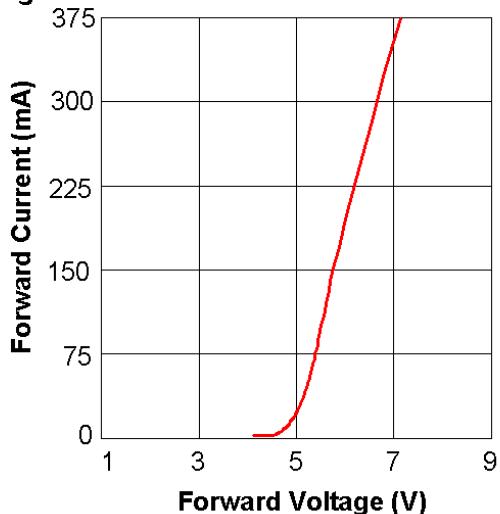
**Part No.: U3535C2VGB30**

Photoelectric parameter curve :

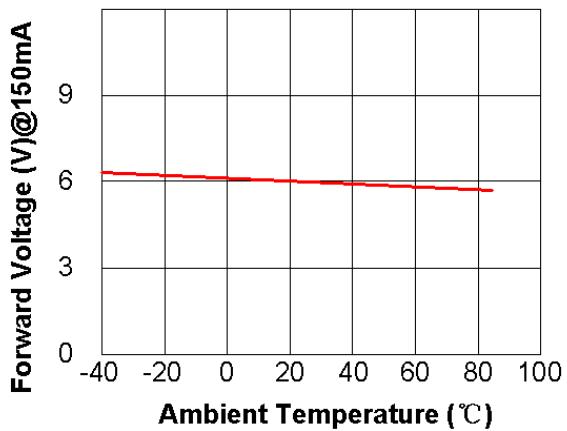
**Fig.1 Relative Radiant Power VS Forward Current**



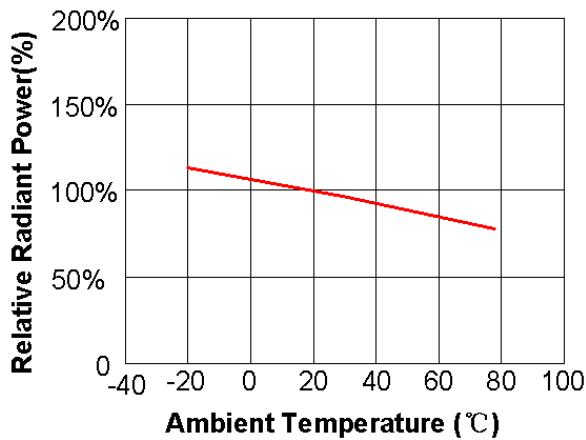
**Fig.2 Forward Current VS Forward Voltage ( $T_a=25^\circ C$ )**



**Fig.3 Forward Voltage VS Ambient Temperature**



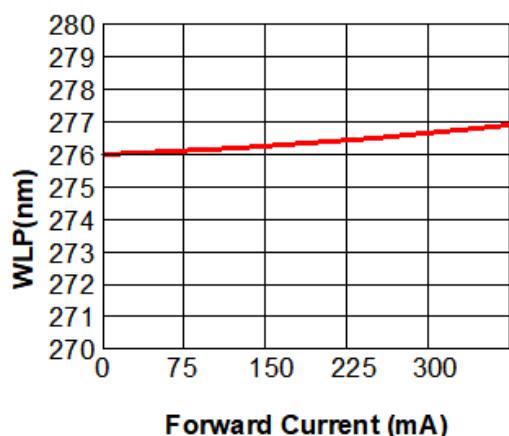
**Fig.4 Relative Radiant Power VS Ambient Temperature**



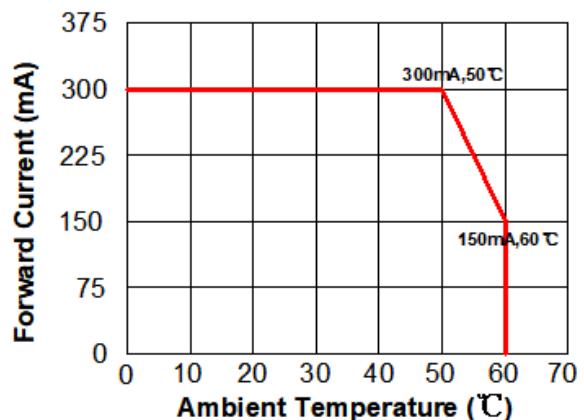


**Part No.: U3535C2VGB30**

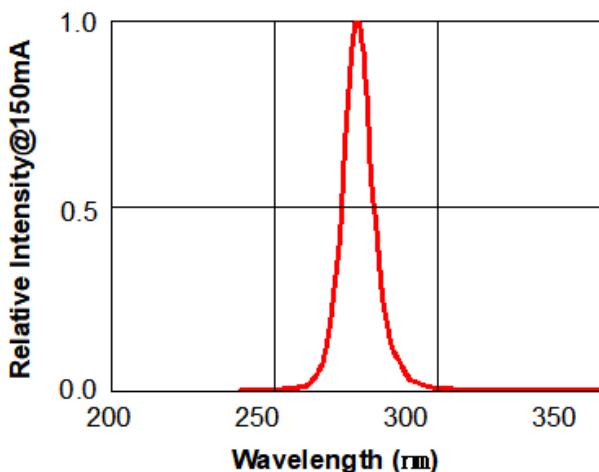
**Fig.5 Peak Wavelength VS Forward Current**



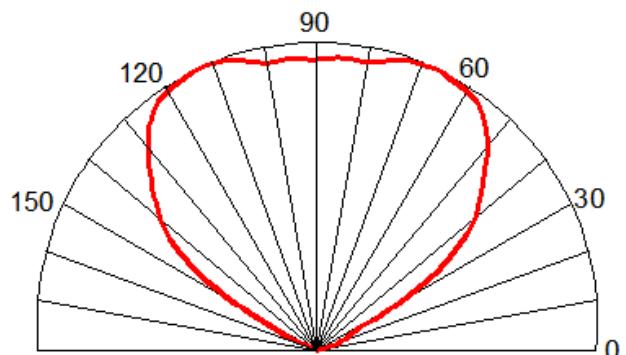
**Fig.6 Forward Current VS Ambient Temperature**



**Fig.7 Relative Intensity VS WLP**



**Fig.8 Radiation pattern@150mA**

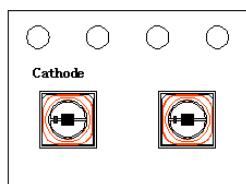
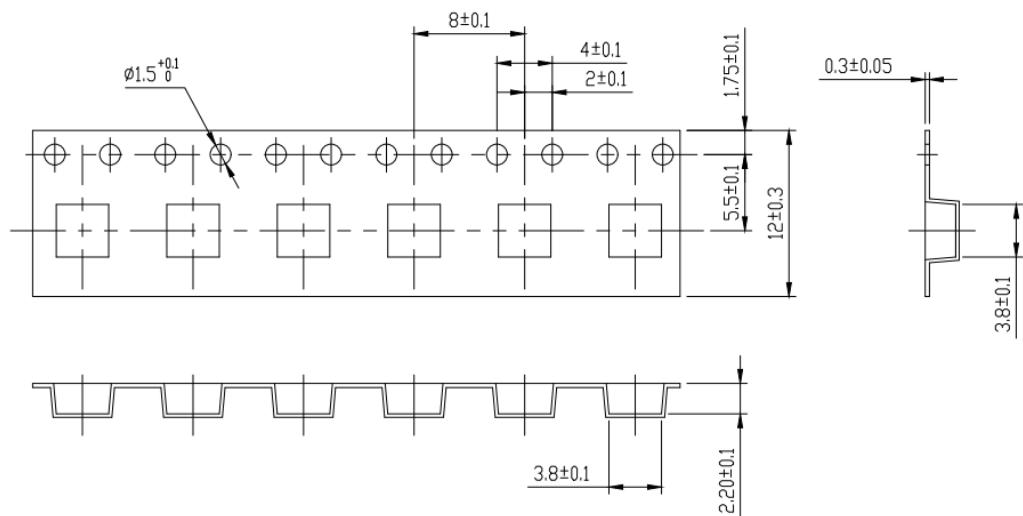




**Part No.: U3535C2VGB30**

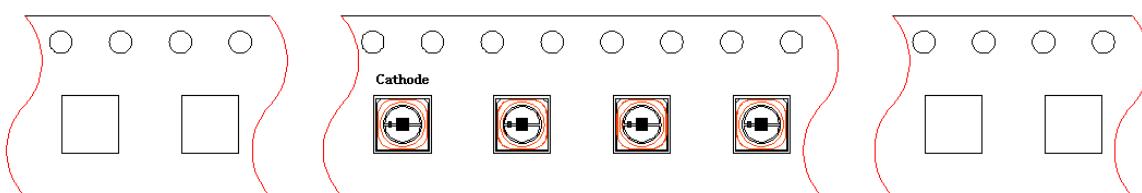
## Packing

(Unit: mm)



The End

Feed Direction



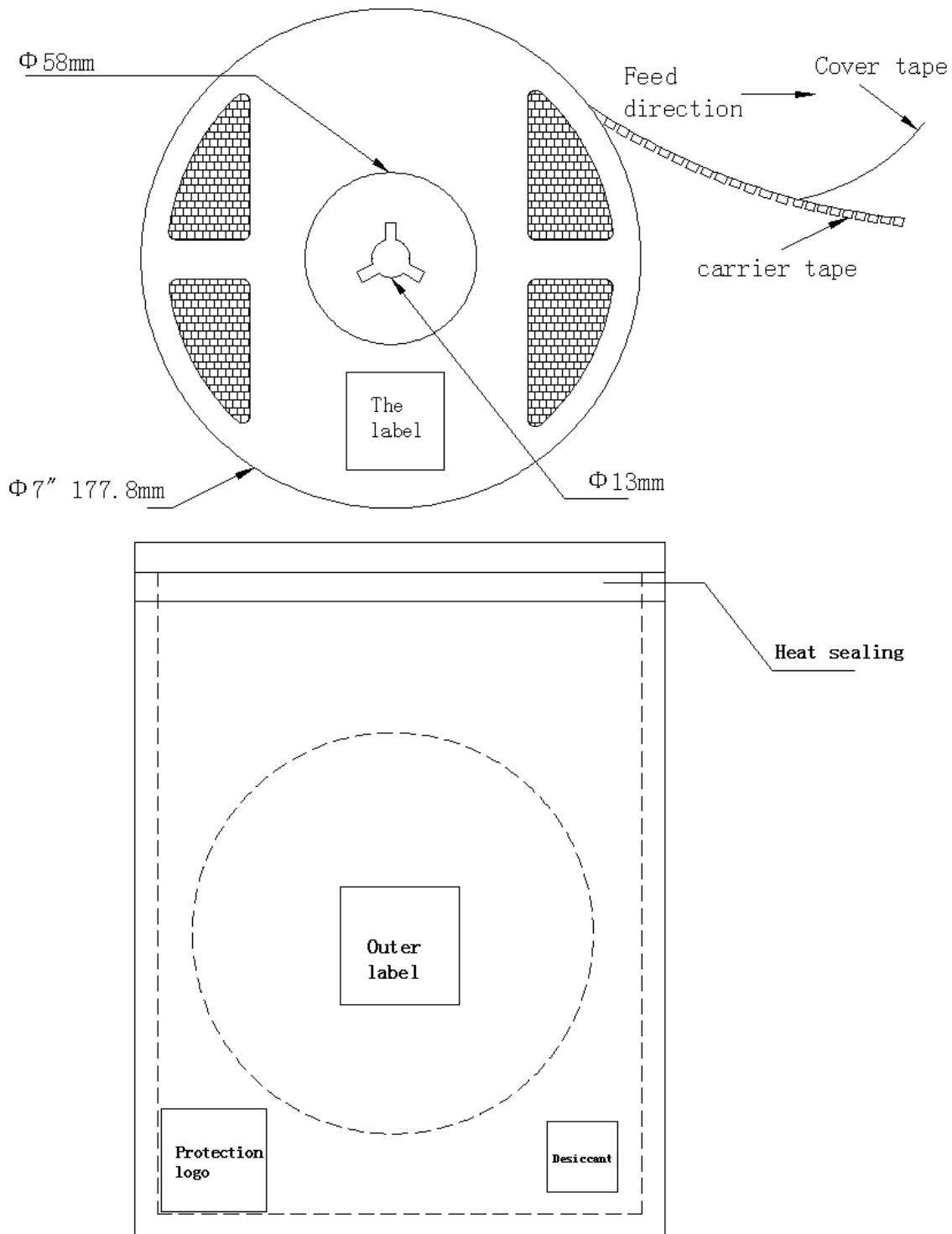
The blank space With 200mm

A roll of 1000PCS

The blank space With 400mm



**Part No.: U3535C2VGB30**



**Notice:**

Please refer to the label value for the actual number of products in each roll, but the total number will not exceed 1000.



**Part No.: U3535C2VGB30**

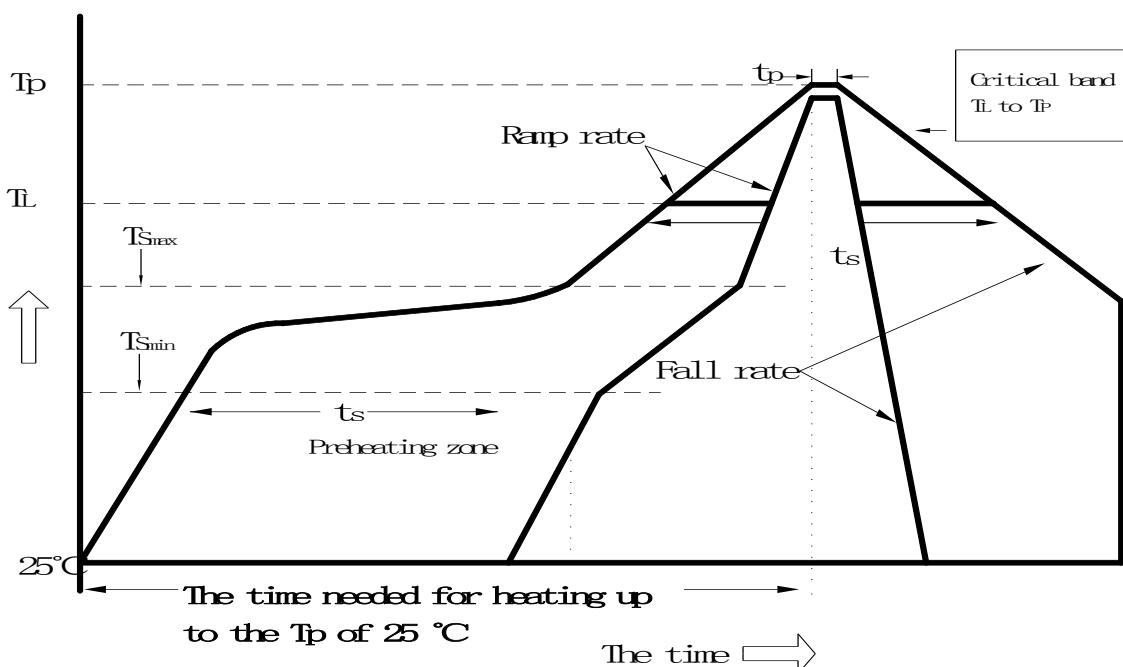
### Reliability test

Test	Test Conditions	Failure Criterion
Normal temperature life test	25°C, 150mA, 1000Hours	Forward voltage, $V_f > 110\%$
High temperature storage	100°C, 1000Hours	
Low temperature storage	-40°C, 1000Hours	
Temperature cycle (100times)	-40°C (30mins) ~ +25°C (5mins) +100°C(30mins) ~ +25°C (5mins)	$P_{opt} < 70\%$

#### Notice:

Test the device at room temperature

### Recommend suitable temperature curve formula





**Part No.: U3535C2VGB30**

Temperature curve characteristics	Lead-free solder
Ramp rate (TSmax to TP)	Max 3°C/S
Preheat: minimum temperature(Tsmin)	150°C
Preheat: maximum temperature(Tsmax)	200°C
Maintain a higher temperature: temperature (TL)	60-180 S
Liquid temperature (TL)	217°C
Maintain a higher temperature: time (TL)	60-150 S
Tp/temperature	260°C
Specify the time within 5°C of the actual peak temperature	20-40 S
The slope rate (Tp to TL)	Max 6°C/S
The time needed for heating up to theTp of 25 °C	Max 8 min