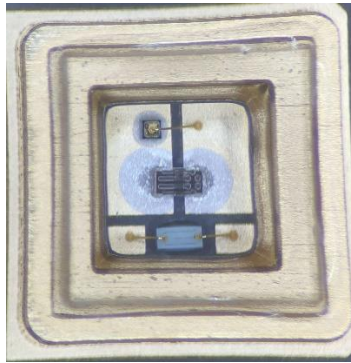


SHENZHEN UGO TECHNOLOGY CO., LTD

Specification for UVLED



Part No: UGO-3535-280P2P05

Version No:1/A

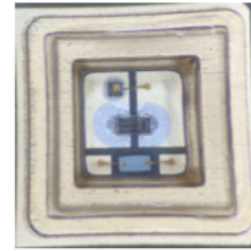
Date:4th December 2019

Customer Approval

- Customer Name: _____
- Checked By: _____
- Approved By: _____
- Date: _____



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES



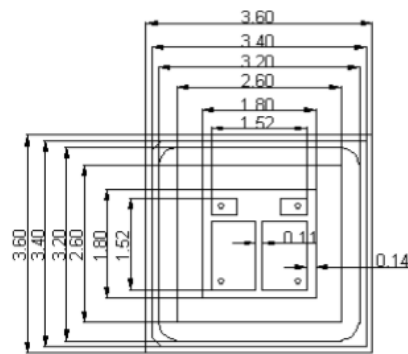
Features

- Deep Ultraviolet LED
- Dimension : 3.6mm×3.6mm×1.62mm
- All Metal Design Cu Substrate/Al reflector
- View Angle 120
- Low thermal resistance

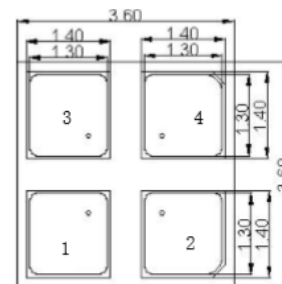
Applications

- Disinfection
- Chemical and Biological analysis

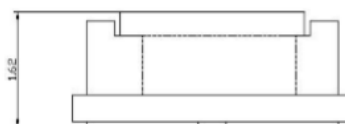
Outline Dimension:



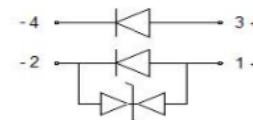
top view



Bottom view



side view



Circuit output

Notes:

1. All dimension units are millimeters.
2. All dimension tolerance is ± 0.2 mm unless otherwise noted.

Typical Optical/ Electrical Characteristics @Ta=25°C:

Parameters	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward Voltage	VF	60mA	—	6	7.5	V
Optical Power	P _{out}	60mA	5	6	—	mW
Radiant Flux	E _e	60mA	—	256	—	uw/cm ²
Peak Wavelength	λ _p	60mA	275	—	285	nm

Parameters	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward Voltage	VF	20mA	—	3.1	3.4	V
Optical Power	P _{out}	20mA	20	—	50	mW
Peak Wavelength	λ _p	20mA	395	—	405	nm

Note

1. Forward voltage measurement allowance is $\pm 0.2V$.
2. Radiant flux measurement allowance is $\pm 10\%$.
3. Irradiance tested at a distance 10mm from Al reflector.
4. Wavelength measurement allowance is $\pm 3nm$.

Absolute Maximum Ratings :

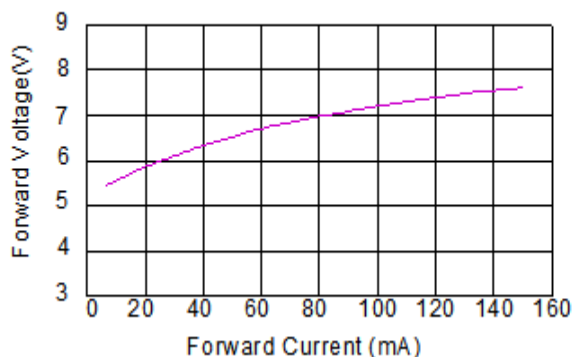
Parameter	Symbol	Rating Value	Units
Input power	Pi	0.5	W
Maximum operating current	IFmax	0.1	A
Thermal Resistance, Junction-Case	RthJ-C1	15	°C/W
Operating Temperature Range	Top	-40°C To +60°C	
Storage Temperature Range	Tstg	-40°C To +100°C	
Lead Soldering Temperature*	TSOL	Max. 230°C for 5sec Max.	

Parameter	Symbol	Rating Value	Units
Input power	Pi	0.1	W
Maximum operating current	IFmax	0.06	A
Operating Temperature Range	Top	-40°C To +60°C	
Storage Temperature Range	Tstg	-40°C To +100°C	
Lead Soldering Temperature*	TSOL	Max. 230°C for 5sec Max.	

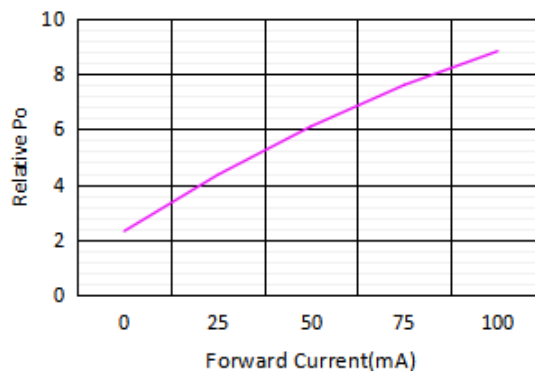
Note: 1. The thermal resistance value is measured with MCPCB (Star).

Characteristic Diagram @Ta=25°C:

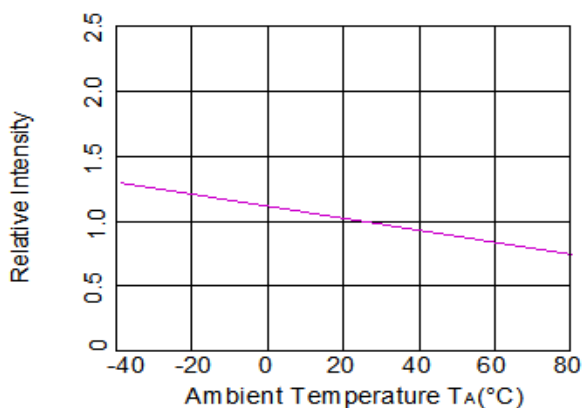
Forward Current vs. Forward Voltage



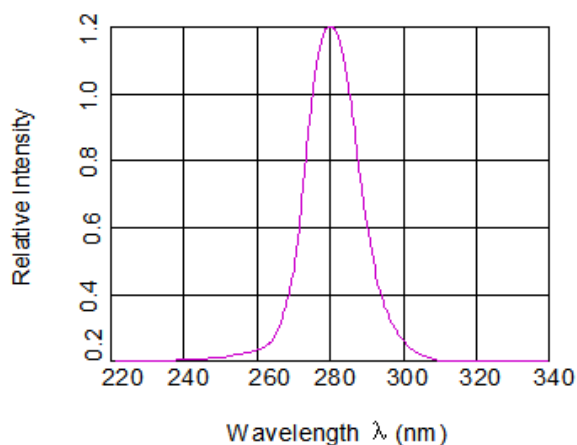
Relative Po vs Forward Current



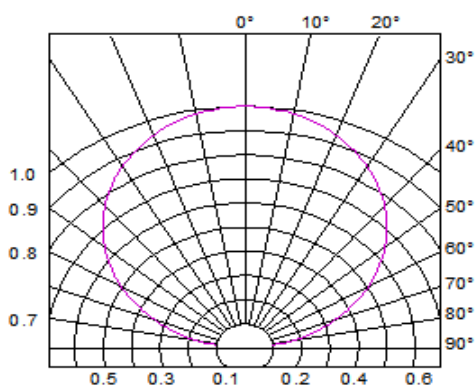
Ambient Temperature VS. Relative Intensity



Relative Intensity Vs. Wavelength

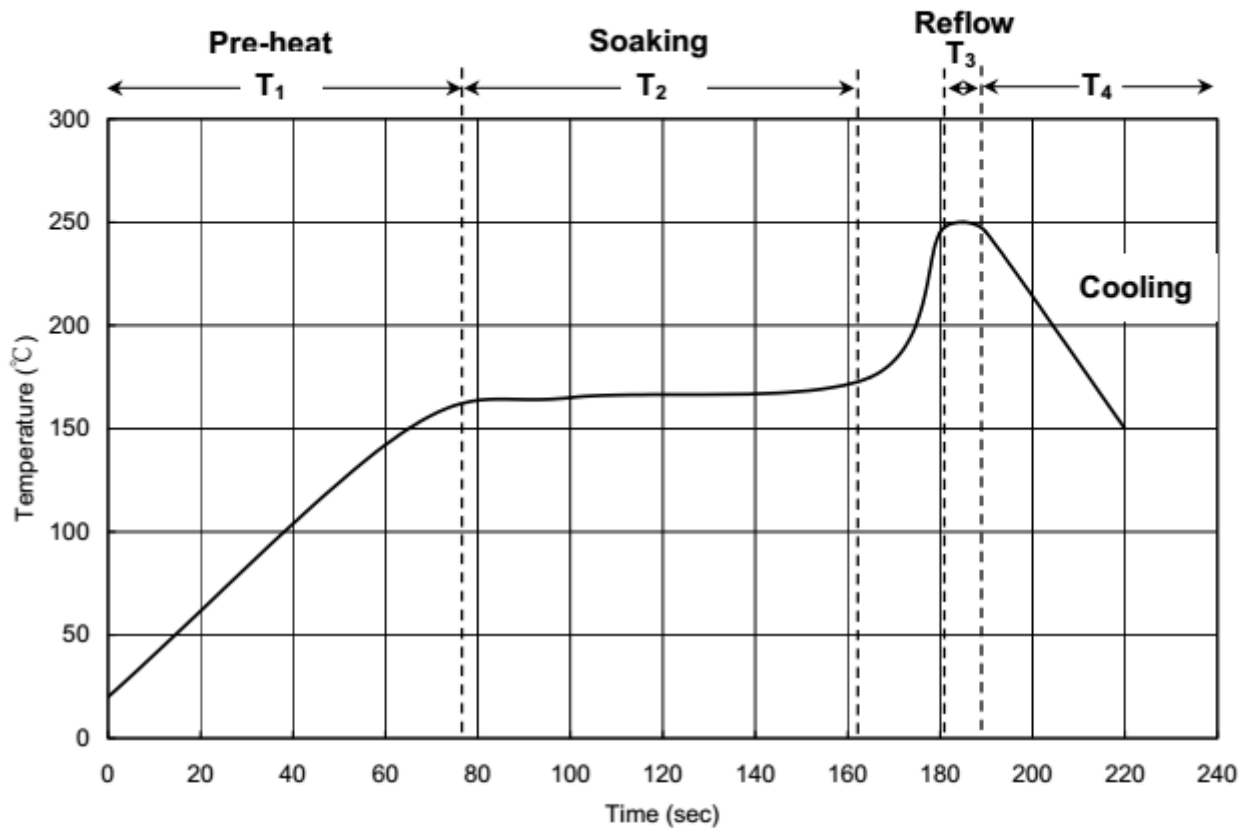


Radiation Diagram



Recommended Solder Profile

Soldering Recommended soldering conditions:



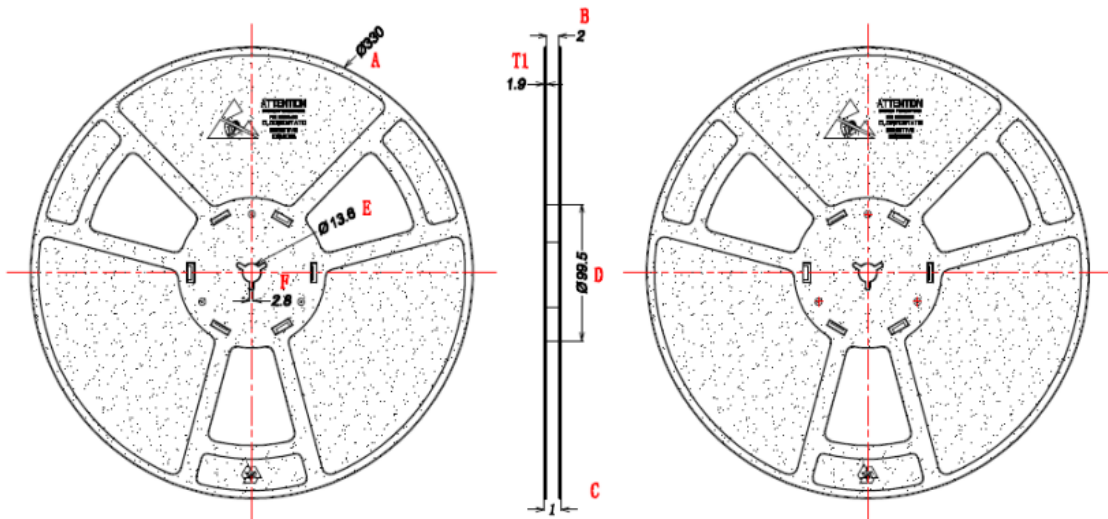
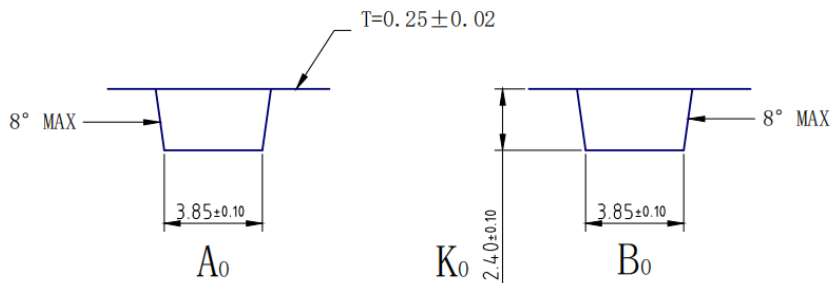
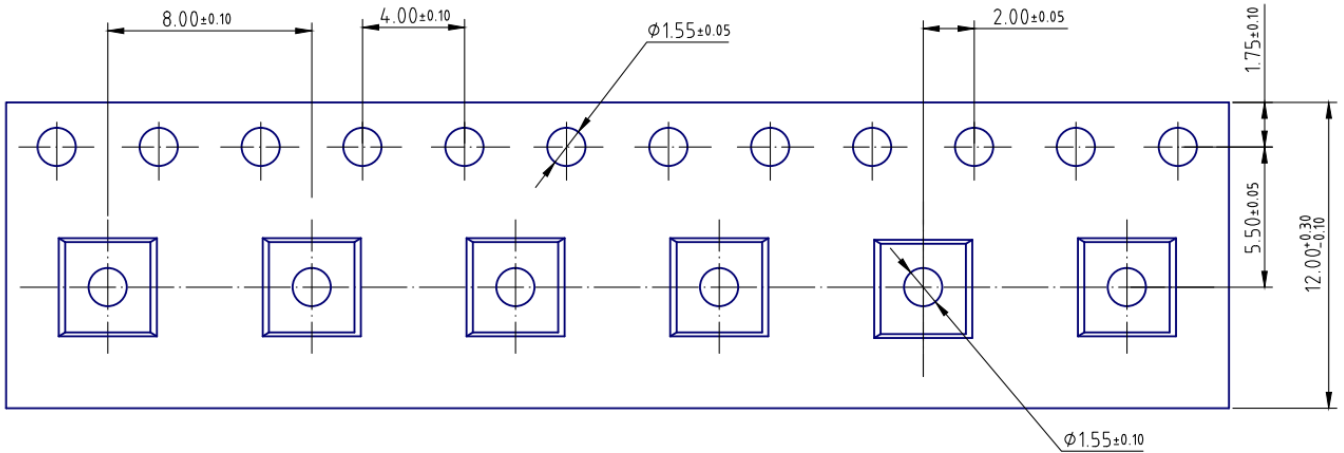
T ₁	Ramp up rate	1.0 ~ 3.0 °C/sec
	Pre-heat time	50 ~ 80 sec
T ₂	Soaking temperature	155 ~ 185 °C
	Dwell time during soaking	60 ~ 120 sec
T ₃	Reflow temperature	240 ~ 250 °C
	Reflow time	Max 10 sec
	Ramp up rate during reflow	1.2 ~ 2.3 °C/sec
T ₄	Cooling	1.0 ~ 6.0 °C/sec

Note: Suggest using Sn96Ag3Cu0.5 lead free solder.

Cleaning

Use alcohol-based cleaning solvents such as isopropyl alcohol to clean the LED if necessary.

Tap and Reel Dimensions (mm):

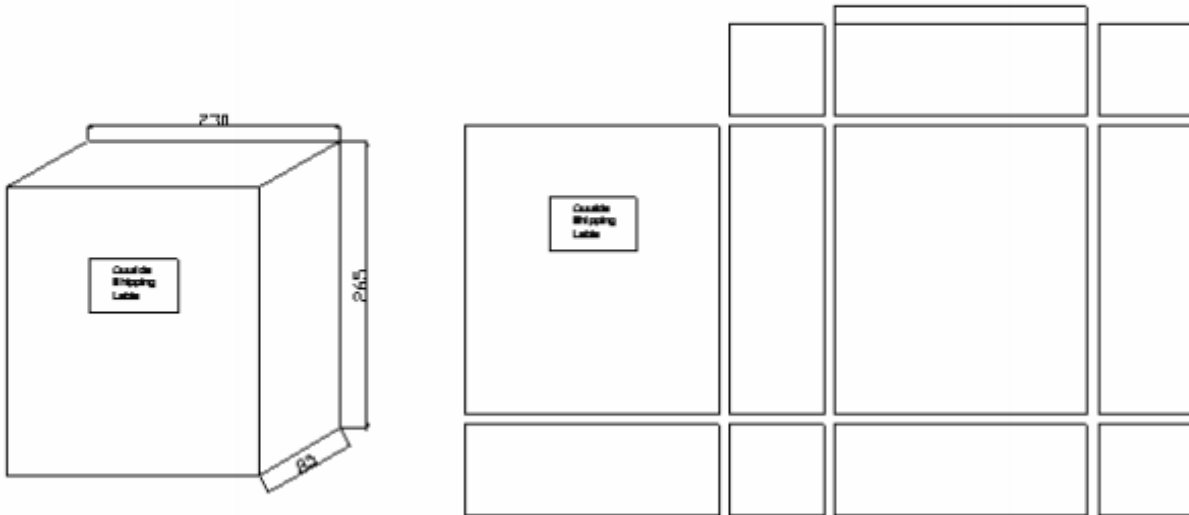


A±1	B _{±0.3}	C±0.3	D±0.5	E±0.3	F±0.2	T1±0.2
∅330	详见下图	∅99.5	∅13.6	2.8	1.9	

产品规格	厚度 1 值	间距 2 值
13*8	12.5	8.7
13*12	16.5	12.7
13*16	20.5	16.7
13*24	28.5	24.7

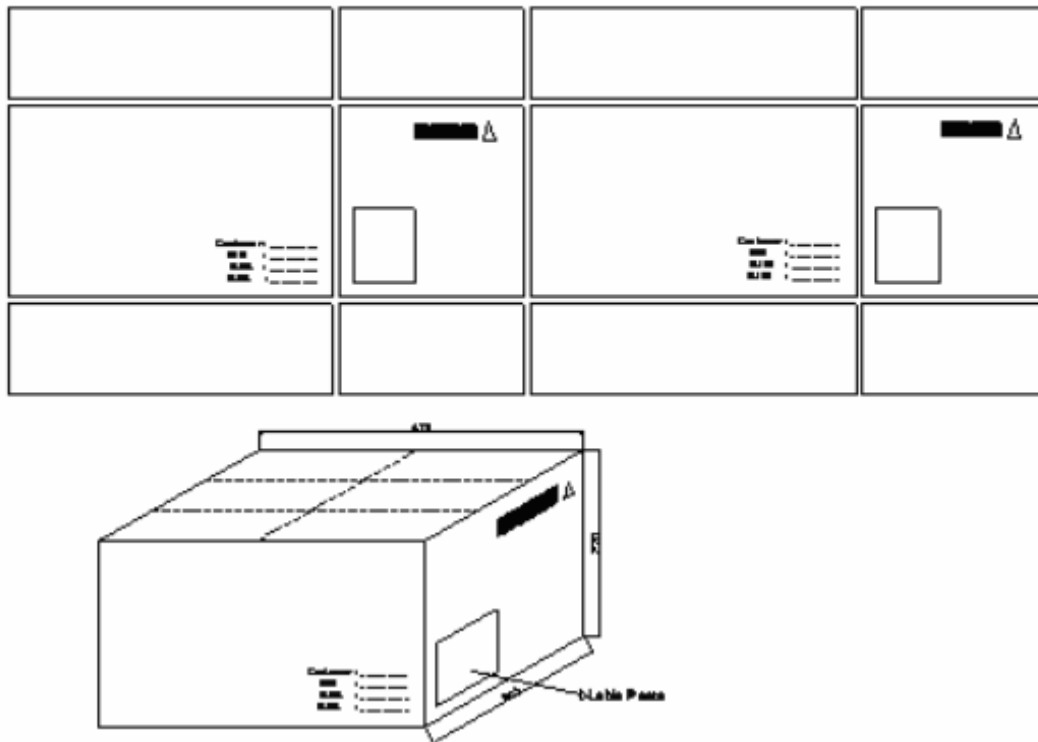
Small Box

Unit : mm



Middle Box

Unit : mm



Product Number Description:

