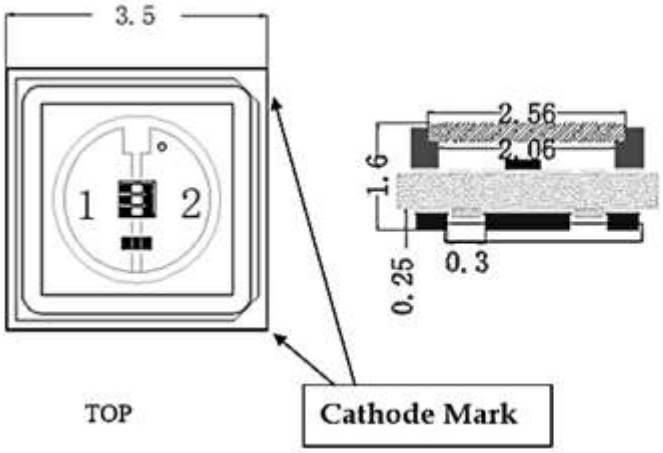
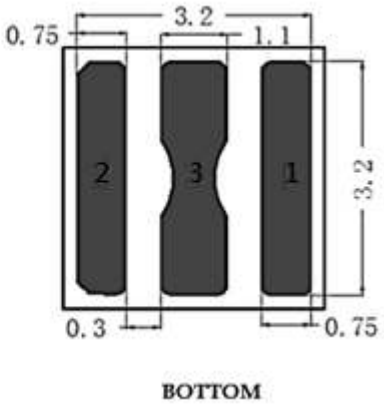
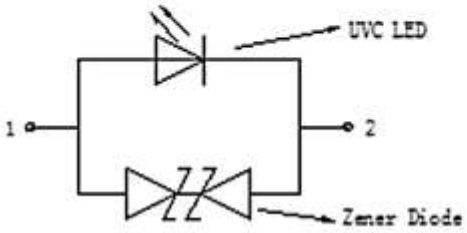
American Opto Plus LED Corp.
L933C-QUV255-2Z
3.5 x 3.5 x 1.6mm Power UVC LED

PACKAGE OUTLINES



PAD CONFIGURATION





PAD	Function
1	Anode
2	Cathode
3	Thermal

Items	Description
Viewing Angle	120°
Emitted Color	Ultraviolet

WARNING:

- UV LEDs emit light in the ultraviolet region (UV light).
- UV light is invisible and may be harmful to the human eye.
- Do not expose the eyes directly to the UV light. Wearing appropriate protective gear when handling.
- Use appropriate warning signs/ labels on the devices equipped with UV LEDs.

ABSOLUTE MAXIMUM RATINGS **(Tj=25°C)**

Parameter	Symbol	Value	Unit
Power Dissipation	P	0.6	W
Forward Current	I_F	100	mA
Thermal Resistance, Junction-Case	R_{th},J-C1	30	°C/W
Operating Temperature	T_{OPR}	-30 ~ +60°C	
Storage Temperature	T_{STG}	-10 ~ +80°C	
Solder Temperature	T_{SOL}	230℃~260℃ for 5sec	

Note: The thermal resistance value is measured with MCPCB.

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Peak Wavelength	λp	I_F=100mA	250	255	260	nm
Radiant Flux	Φe		8	10	14	mW
Radiant Irradiance	E_e		--	2.8	--	mW/cm^2
Forward Voltage	V_F		5	6	8	V
Spectral Half-Width	Δλ		--	10.5	--	nm
View Angle	2Θ1/2		--	120	--	Deg

OPTICAL-ELECTRICAL CHARACTERISTICS **(Tj=25°C)**

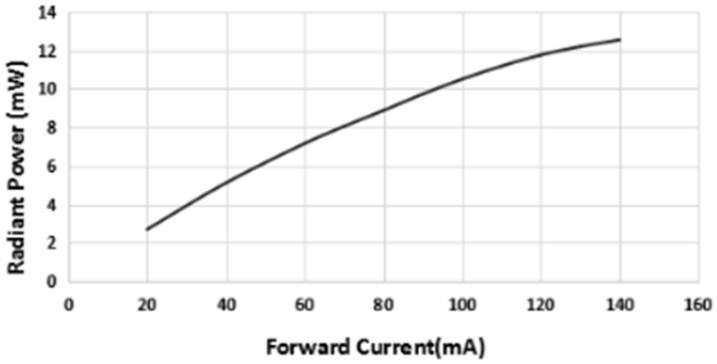
Note:

1. Forward voltage measurement allowance is ±0.2V.
2. Radiant flux measurement allowance is ±10%.
3. Irradiance tested at a distance 10mm from the lens.
4. Wavelength measurement allowance is ±3nm.

ELECTRICAL-OPTICAL CHARACTERISTICS

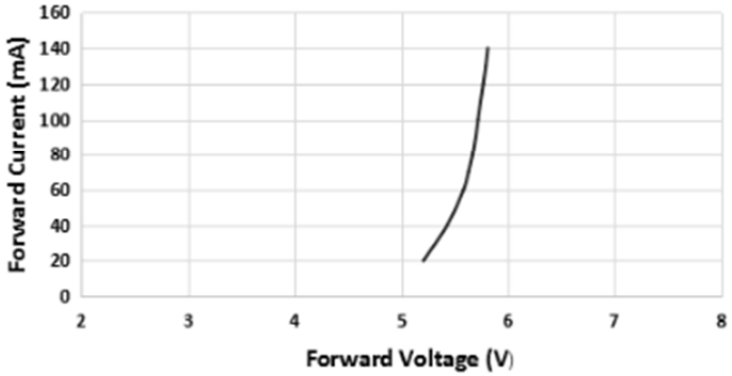
Radiant Power vs. Forward Current

Fig.1 Radiant Power vs. Forward Current



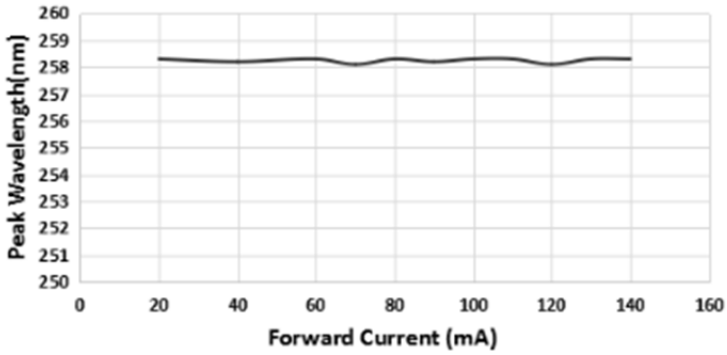
Forward Current vs. Forward Voltage

Fig.2 Forward Voltage vs. Forward Current

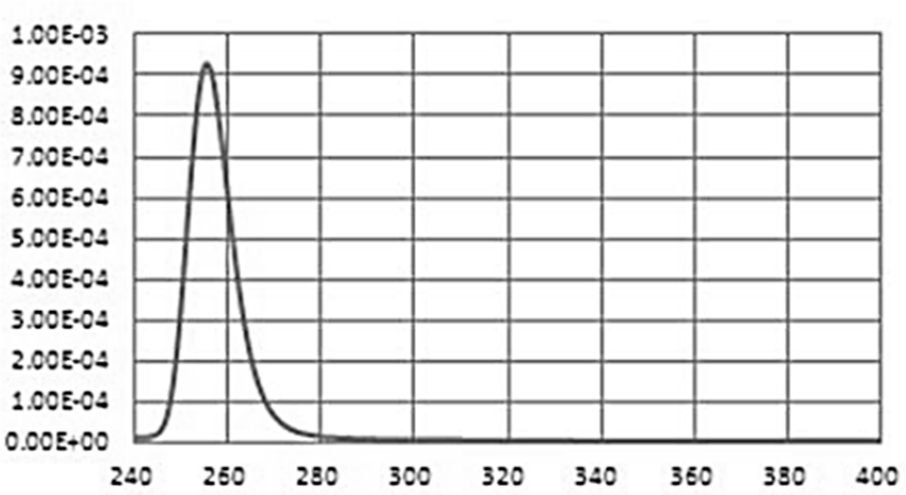


Peak Wavelength vs. Forward Current

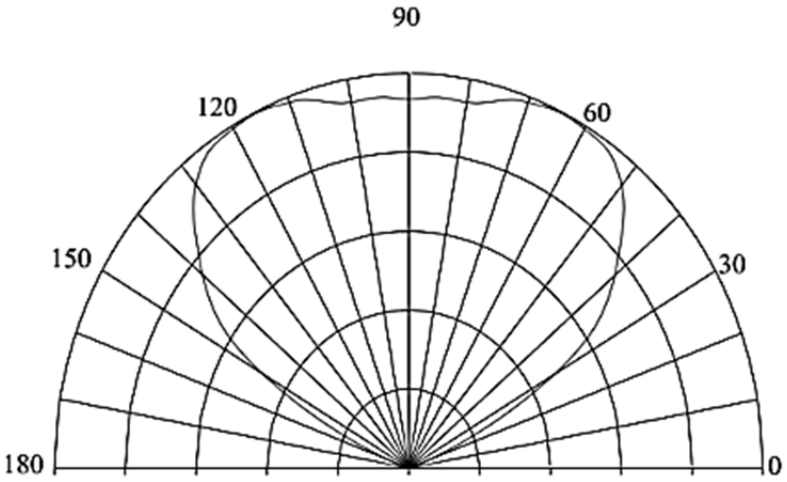
Fig.3 Peak Wavelength(nm) vs. Forward Current



Spectral Power Distribution



Distribution curve flux



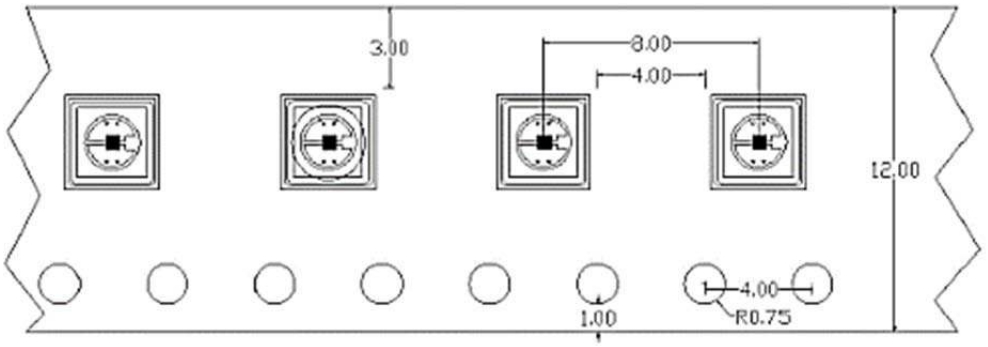
TAPE DIMENSION

Lens Type

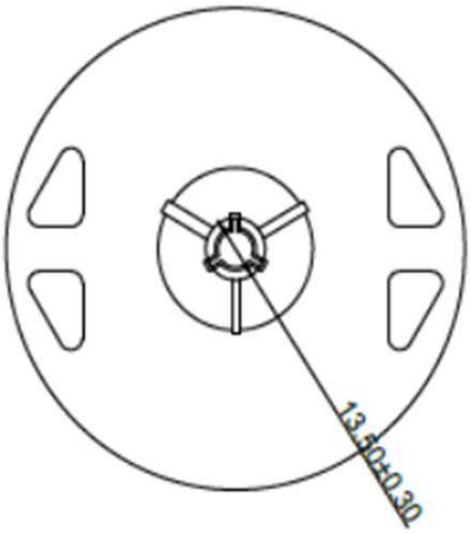
Tapping Dimension Packaging Specification

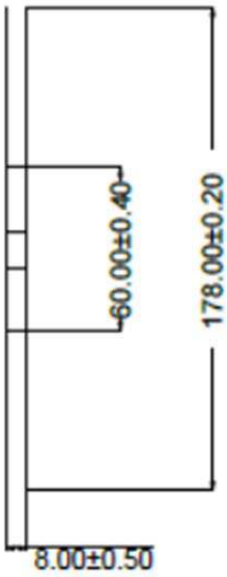
120° Lens Type:

- Moisture proof bag.
- 1 Reel/bag
- Q'ty: 1,000(MAX)/Reel
- Unit: mm

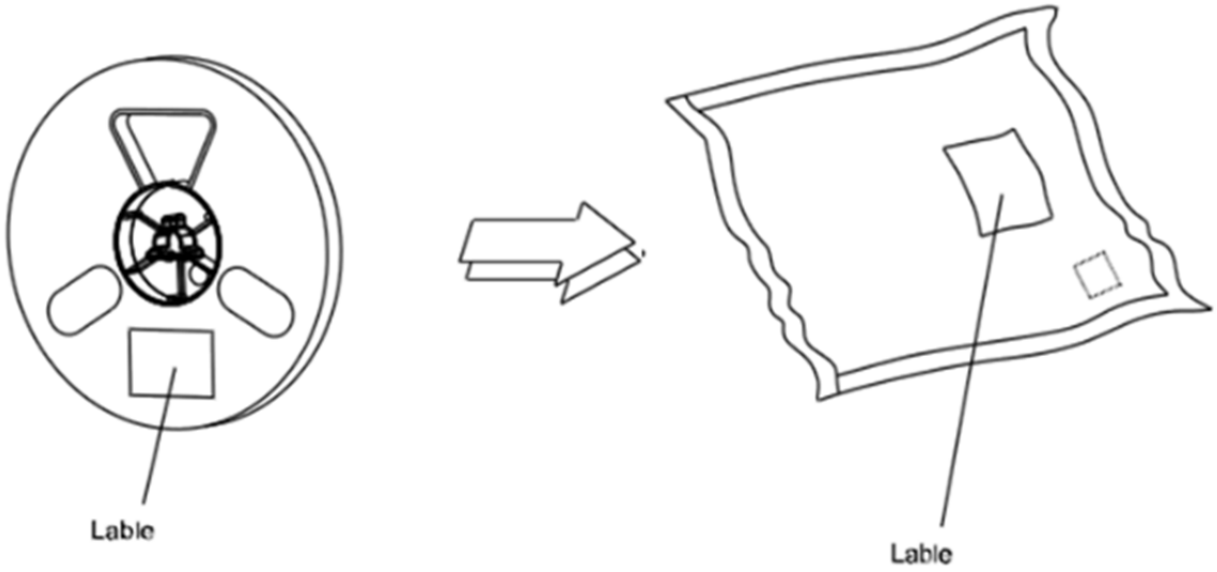


REEL DIMENSION



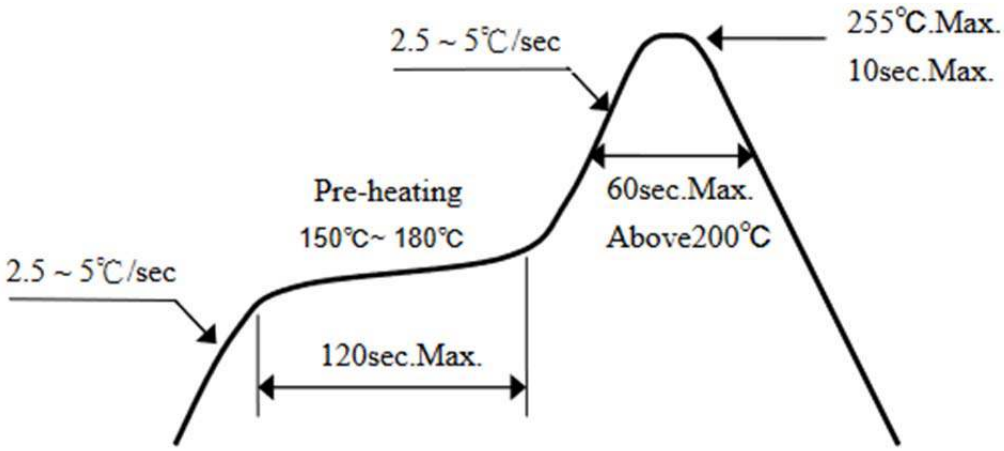


Anti-Statistic Bag:



RECOMMENDED SOLDERING CONDITIONS

Reflow Soldering



Note: Recommended tin glue specifications:

1. Melting temperature: 150~255°C.
2. Contains: Sn96.5%, Ag3.0%, Gu 0.5% JIS Z 3282 TEST.
3. Never move to next process until the component is cooled down to room temperature after reflow.

Manual Soldering
(We strongly do not recommend this method)

1. Soldering tin material: tin 6/4 alloy or contained Ag.
2. To prevent cracking, please bake before manual soldering.
3. Keep the temperature on the edge of iron at 300°C Max. (25W) and apply for 3 second.
4. If the temperature become higher, apply in a shorter time (1sec).
5. In manual soldering, be careful not to damage the package especially the terminal or resin. (Do not stress the product when soldering).
6. Do not re-use the removed soldered product. It is recommended using an iron with a temperature control.