



American Opto Plus LED Corp.

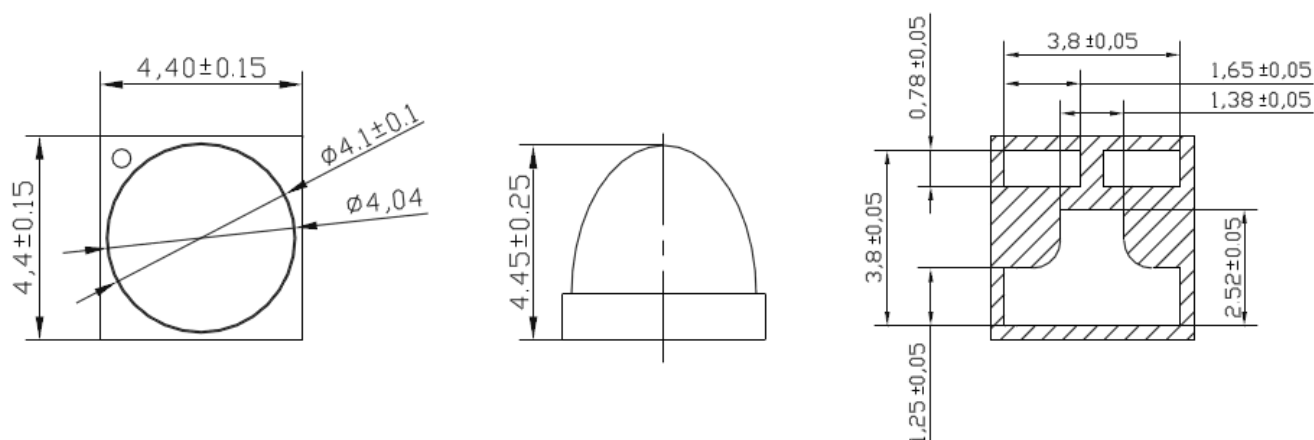
L944-UV265-4

4.4 x 4.4 x 4.45mm Ultraviolet SMD LED

FEATURE

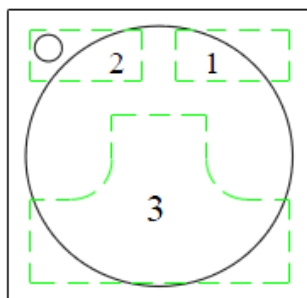
- Deep Ultraviolet LED
- All metal design Cu substrate/ Al reflector
- Viewing angle: 30 degree
- Low thermal resistance

OUTLINE DIMENSION

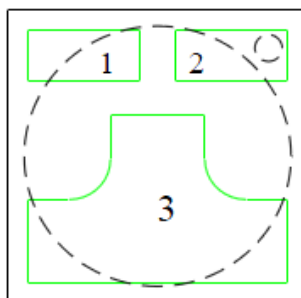


Notes: All dimensions are in millimeters unless otherwise noted

PAD CONFIGURTION



TOP



BOTTOM

PAD	Function
1	Cathode
2	Anode
3	Thermal



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ABSOLUTE MAXIMUM RATINGS

(Ta=25°C)

	Symbol	Absolute Maximum Rating	Unit
Power Dissipation	Pd	0.5	W
Forward Current	I _F	50	mA
Thermal Resistance, Junction-Case	R _{th, J-C1}	15	°C/W
Operating temperature Range	T _{opr}	-40~+60	°C
Storage temperature Range	T _{stg}	-40~+100	°C
Soldering Condition	T _{sld}	260°C for 5 sec	--

Notes: The thermal resistance value is measured with MCPCB

OPTICAL-ELECTRICAL CHARACTERISTICS

(Ta=25°C)

	Symbol	Test condition	Min.	Typ.	Max.	Unit
Peak Wavelength	λ _p	I _F =50mA	265	--	275	nm
Radiant Flux	Φ _e		2	3	--	mW
Radiant Irradiance	E _E		--	7	--	mW/cm ²
Forward Voltage	V _F		--	8	10	V
Spectral Half width	Δλ		--	15	--	nm

Notes:

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



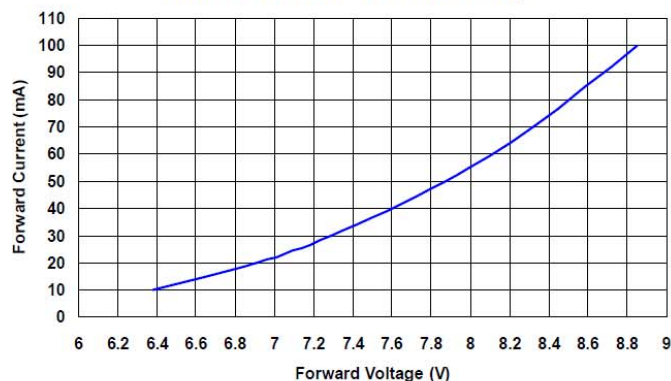
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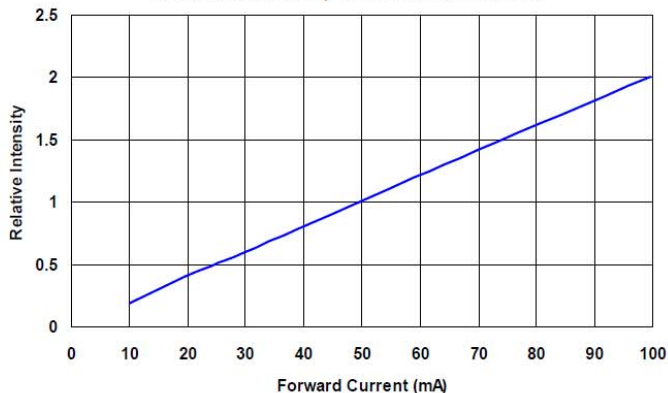
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TYPICAL ELECTRICAL-OPTICAL CHARACTERISTIC CURVES

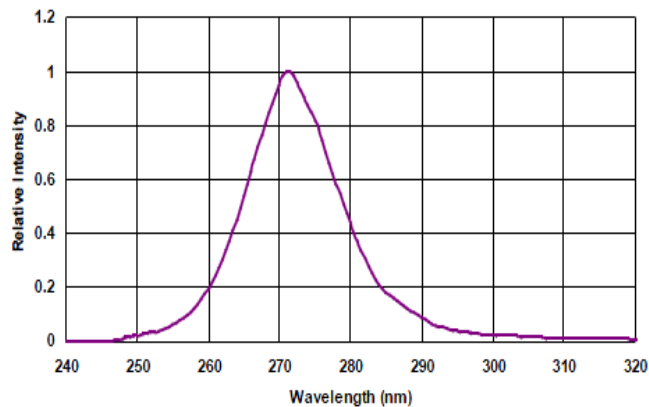
Forward Current vs. Forward Voltage



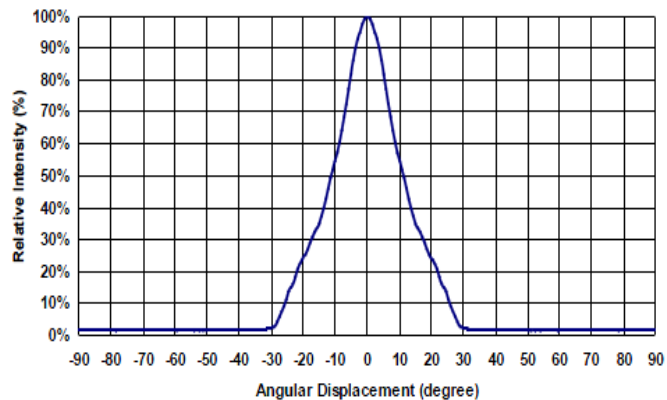
Relative Intensity vs. Forward Current



Spectral Power Distribution



Typical Radiation Pattern



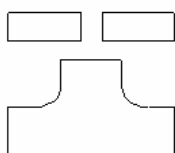
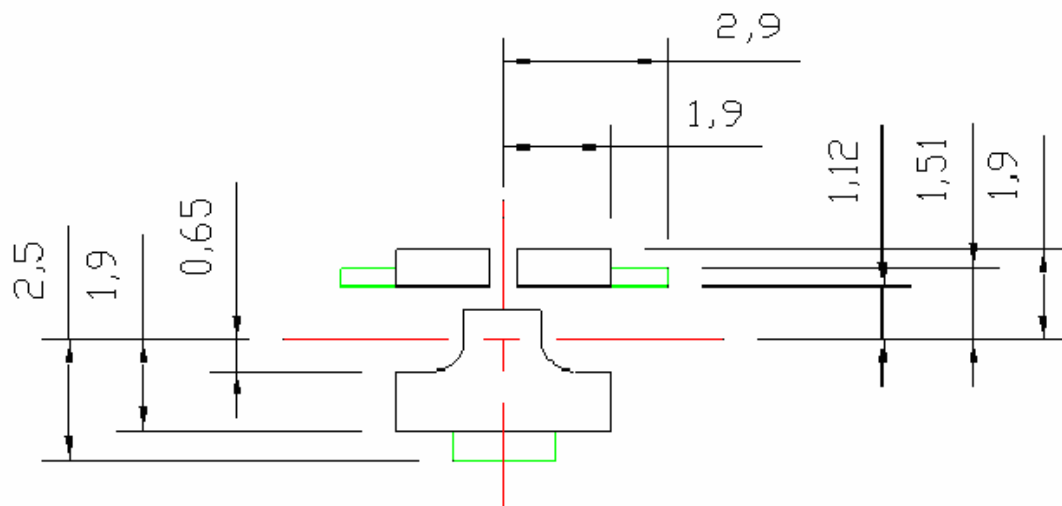


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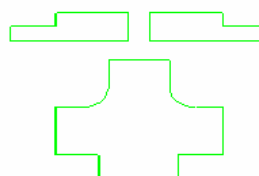
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RECOMMENDED SOLDERING PAD PATTERN



**SOLDER
MASK**



**COPPER
LAYER**



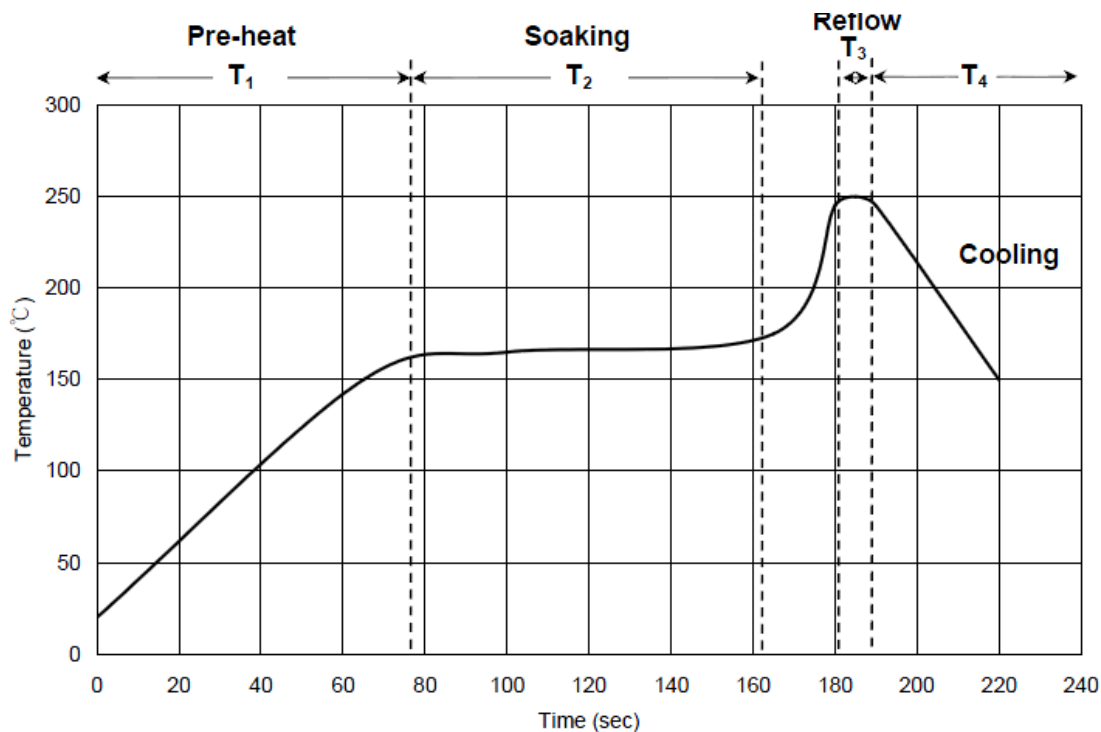
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SOLDERING CONDITIONS

- Recommended soldering profile



T1	Ramp up rate	1.0 ~ 3.0 °C/sec
	Pre-heat time	50~80 sec
T2	Soaking temperature	155~185°C
	Dwell time during soaking	60~120 sec
T3	Reflow temperature	240~250°C
	Reflow time	10 sec Max
	Ramp up rate during reflow	1.2~2.3 °C/sec
T4	Cooling	1.0~6.0 °C/sec

Notes:

- Recommend using Sn96Ag3Cu0.5 lead free solder
- Use alcohol-based cleaning solvents such as isopropyl alcohol to clean LED if necessary

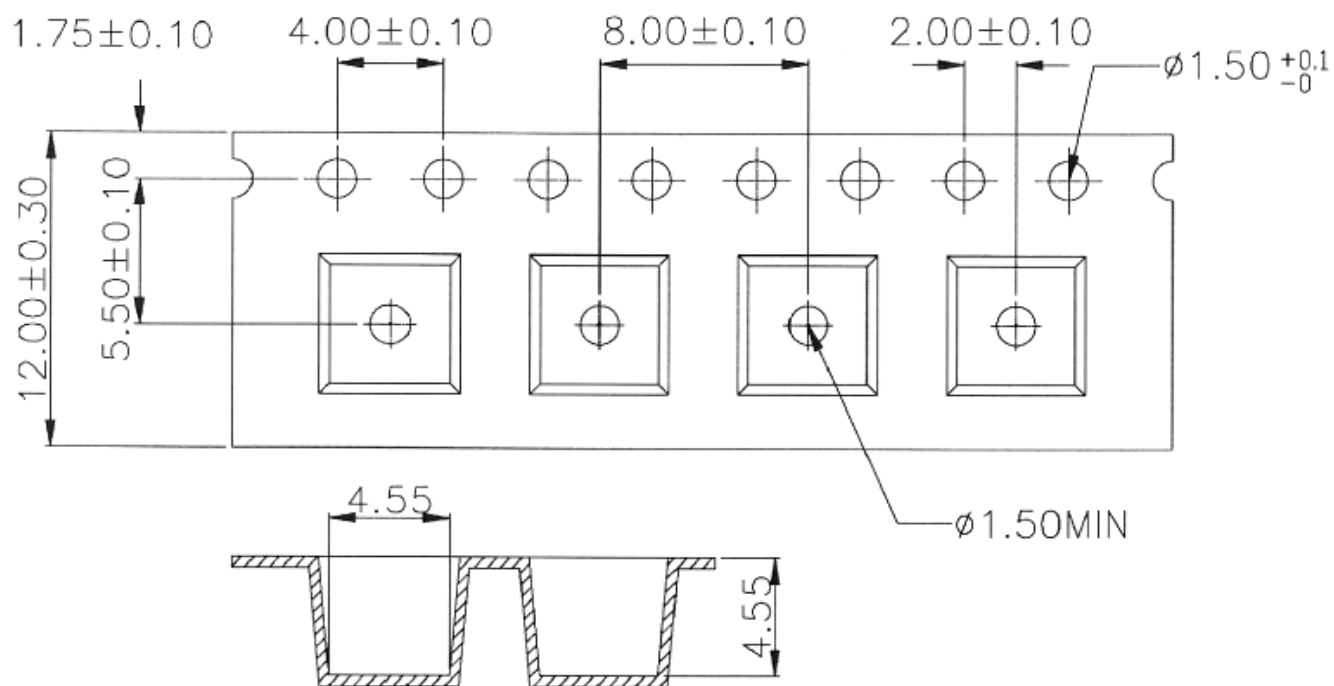


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TAPE DIMENSION



Notes:

1. All dimensions are in millimeter unless otherwise noted
2. Moisture proof bag
3. 1 Reel/ bag
4. Quantity: 500(max)/ Reel

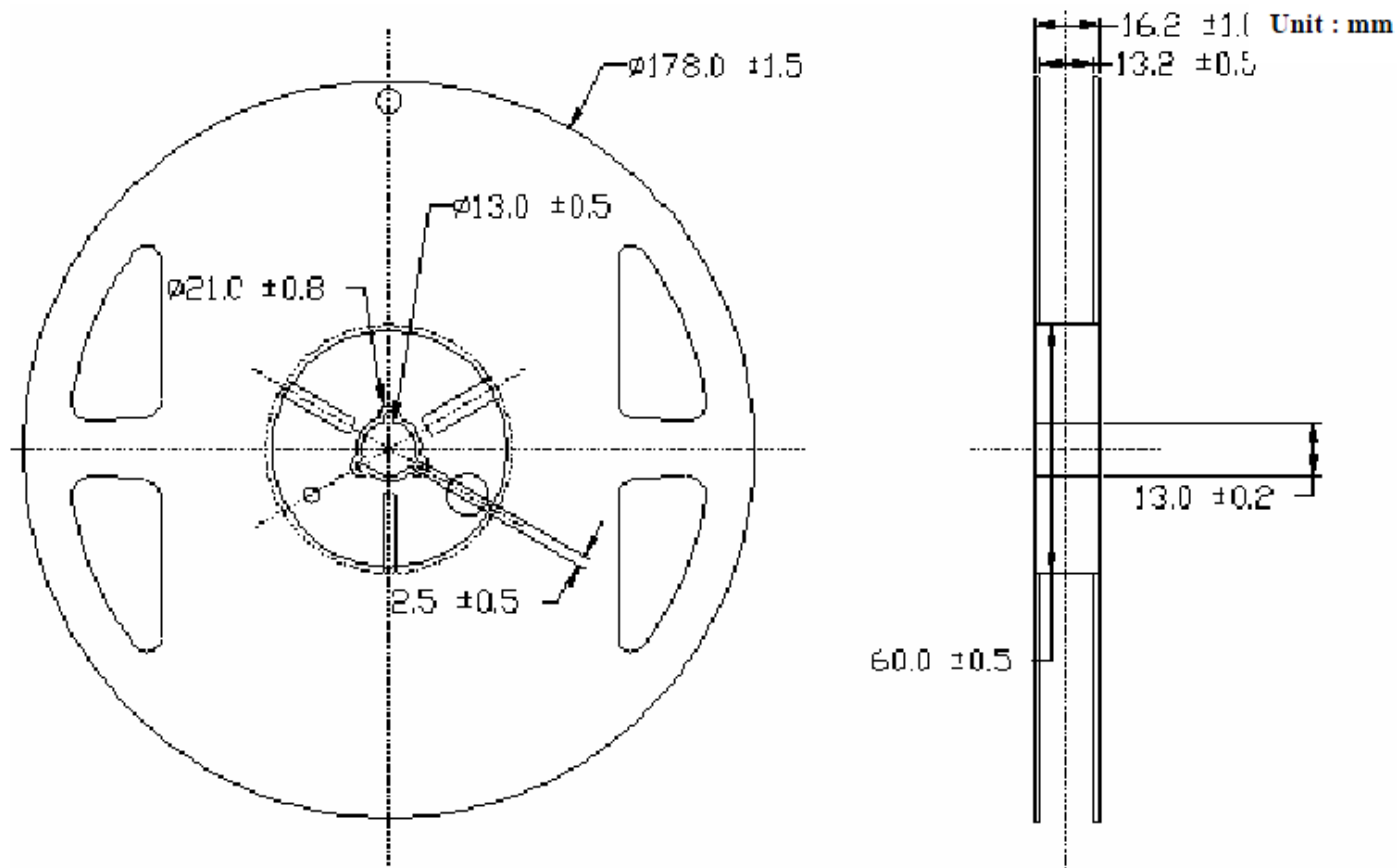


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REEL DIMENSION



Box Type	Dimension(mm)	Reel/Box	30°Lens Type(pcs)
Small box(S)	230 x 85 x 265	5	2500
Middle box(M)	470 x 265 x 270	30	15000
Large box(L)	470 x 435 x 270	50	25000