



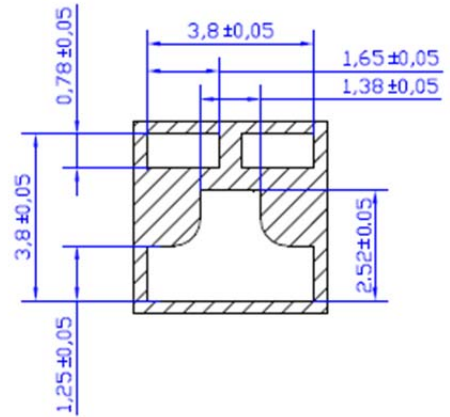
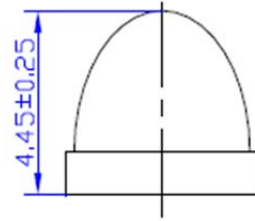
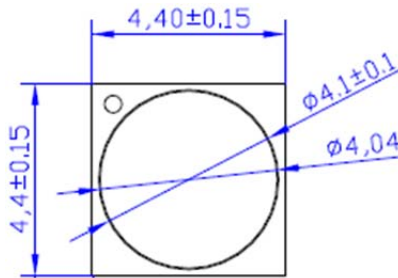
# American Opto Plus LED Corp.

## L944-MUV265-4

4.4 x 4.4 x 4.45mm Dome Lens Power UVC LED

### FEATURES

- Dimensions:  
4.4mm (L) x 4.4mm (W)
- Deep Ultraviolet LED
- All Metal Design  
Cu Substrate / Al Reflector
- View Angle 30°
- Low Thermal Resistance

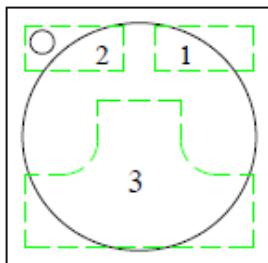


### APPLICATIONS

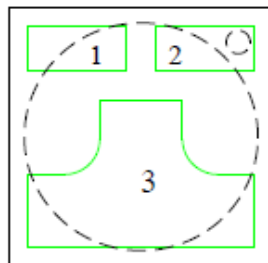
- Disinfection
- Chemical and Biological  
Analysis

Unit = mm

### PAD CONFIGURATION



Top



Bottom

PAD	FUNCTION
1	Cathode
2	Anode
3	Thermal

Part Number	Emitted
L944-MUV265-4	Deep Ultraviolet



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### ABSOLUTE MAXIMUM RATINGS

(T<sub>j</sub>=25°C)

Parameter	Symbol	Ratings	Unit
Forward Current	I <sub>F</sub>	150	mA
Power Dissipation	P	1.5	W
Thermal Resistance, Junction-Case	R <sub>TH, J-C1</sub>	15	°C/W
Operating Temperature Range	T <sub>OPR</sub>	-40~+60	°C
Storage Temperature Range	T <sub>STG</sub>	-40~+100	°C
Soldering Temperature	T <sub>SOL</sub>	260°C for 5 seconds	

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

### ELECTRICAL-OPTICAL CHARACTERISTICS

(T<sub>j</sub>=25°C)

Parameter	Symbol	Min	Typ	Max	Unit
Radiant Irradiance	E <sub>E</sub>	--	25	--	mW/cm <sup>2</sup>
Forward Voltage	V <sub>F</sub>	--	8	10	V
Peak Wavelength	λ <sub>P</sub>	265	--	275	nm
Spectral Half-Width	Δλ	--	15	--	nm
Radiant Flux	Φ <sub>E</sub>	8	10	--	mW

#### Note

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.



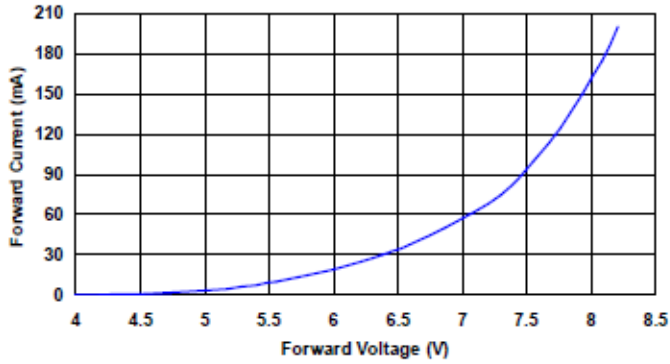
# American Opto Plus LED Corp.

## L944-MUV265-4

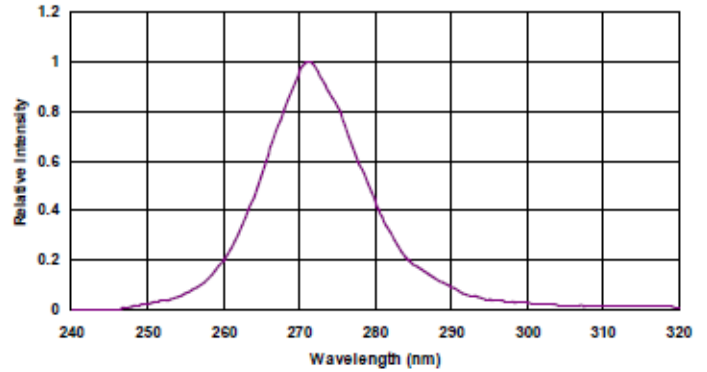
4.4 x 4.4 x 4.45mm Dome Lens Power UVC LED

### CHARACTERISTIC DESIGN

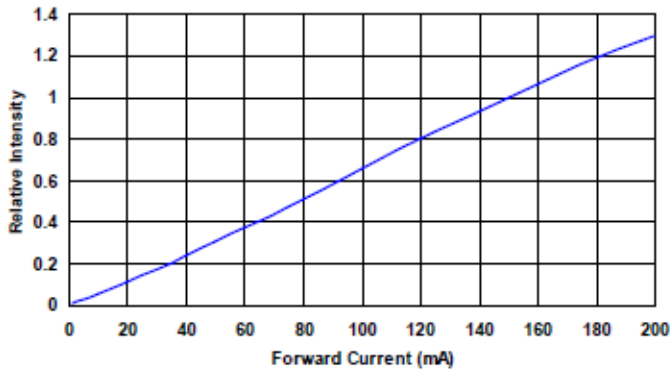
Forward Current vs. Forward Voltage



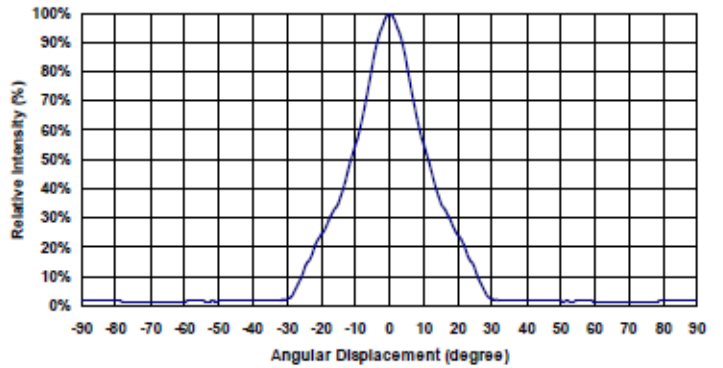
Spectral Power Distribution



Relative Intensity vs. Forward Current



Typical Radiation Pattern



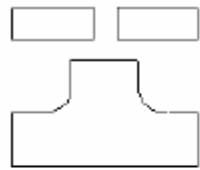
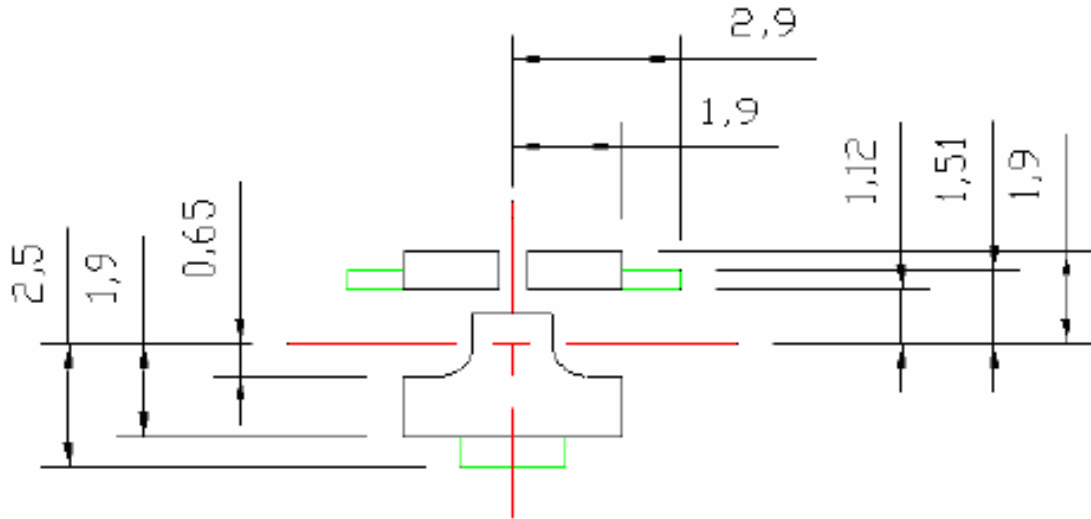


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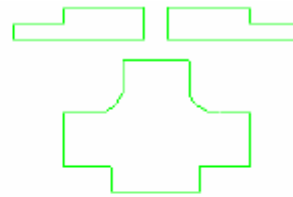
## L944-MUV265-4

4.4 x 4.4 x 4.45mm Dome Lens Power UVC LED

### RECOMMENDED SOLDERING PATTERN



**SOLDER  
MASK**



**COPPER  
LAYER**

**Fig. Solder Pad Layout**



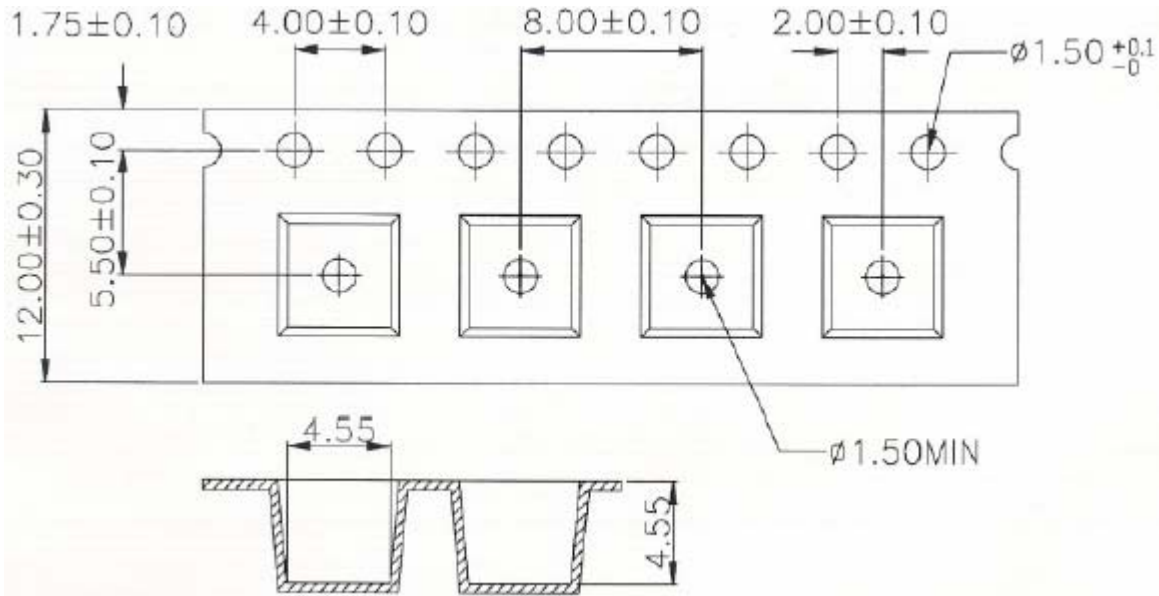
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## L944-MUV265-4

4.4 x 4.4 x 4.45mm Dome Lens Power UVC LED

### PACKAGING DIMENSION

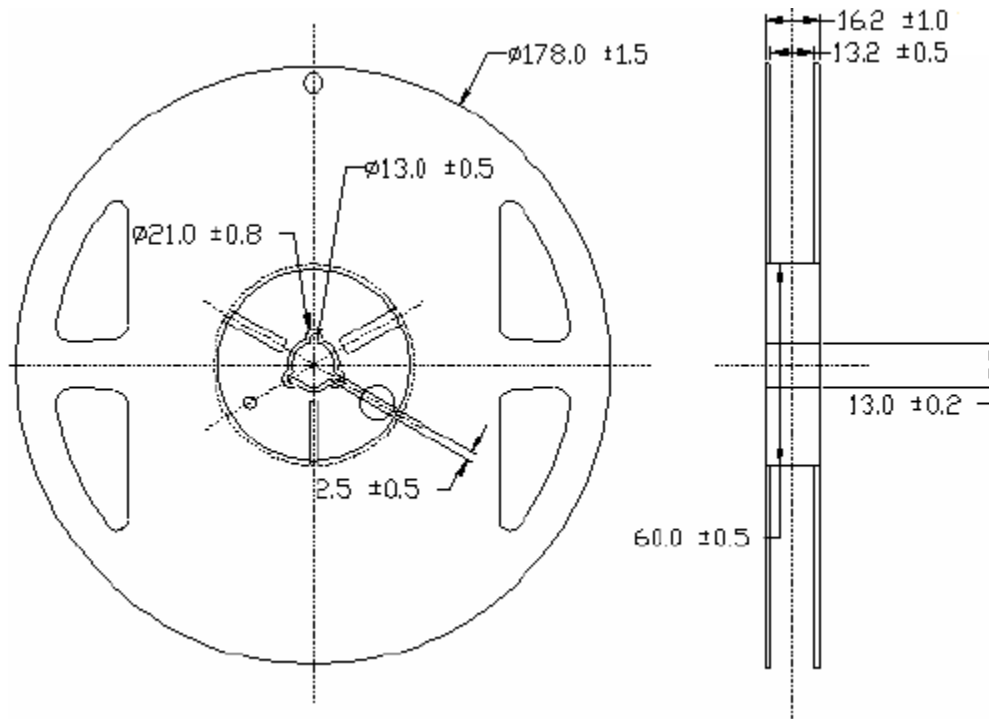
UNIT: mm



### REEL PACKAGING

UNIT: mm

Reel Part:



### Tapping Dimension Packaging Specification: 30 Degree Lens Type

1. 1 Reel / Bag
2. Quantity: 500 (MAX) / Reel

Version 1.0    Date: 10-19-2016. Specifications are subject to change without notice.

American Opto Plus LED Corp. 1206 E. Lexington Ave., Pomona CA 91766 Tel: 909-465-0080 Fax: 909-465-0130 [www.aopled.com](http://www.aopled.com)

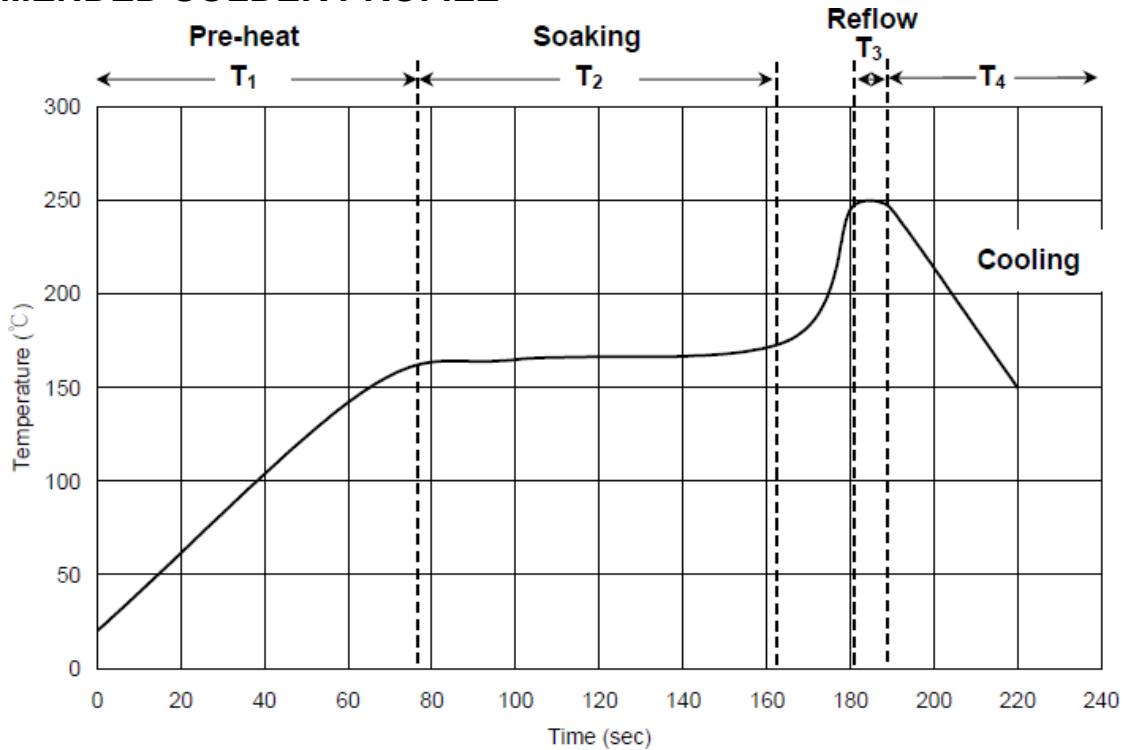


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### RECOMMENDED SOLDER PROFILE



T <sub>1</sub>	Ramp-Up Rate	1.0 ~ 3.0 °C / sec
	Pre-Heat Time	50 ~ 80 sec
T <sub>2</sub>	Soaking Temperature	155 ~ 185 °C
	Dwell Time During Soaking	60 ~ 120 sec
T <sub>3</sub>	Reflow Temperature	240 ~ 250 °C
	Reflow Time	Max 10 sec
	Ramp Up Rate During Reflow	1.2 ~ 2.3 °C / sec
T <sub>4</sub>	Cooling	1.0 ~ 6.0 °C / sec

Note: Suggest using Sn96Ag3Cu0.5 lead free solder.

### CLEANING

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