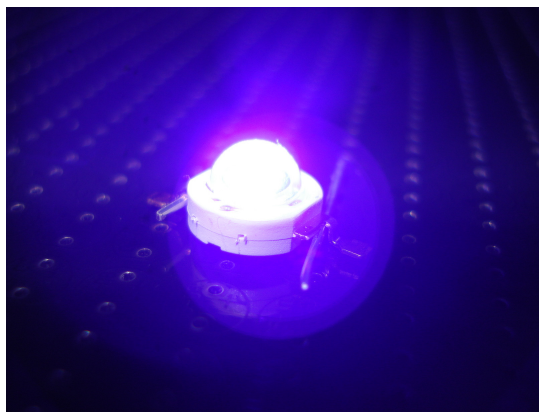


## UV LED EMITTER – 440nm Series

### Product Pictures.



### Product Applications.

Fluorescence disclosing and verification  
Chemical analysis equipment  
Medical and biomedical applications  
Hazardous materials detection.  
Industrial emitters  
Architectural lighting  
Entertainment lighting

### Product Features.

Lambertian Radiation Pattern  
Superior ESD protective circuit  
High Power Intensity  
UV resistant special resin provides high reliability  
Tight tolerance of +/- 5nm binning shipment  
Low Voltage DC Operated  
Lead(Pb)Free Product-RoHS Compliant  
Capable of lead free solder reflow process

### Absolute Maximum Ratings. (Ta=25°C)

Item	Symbol	Value	Unit
DC Forward Current	I <sub>F</sub>	350	mA
Peak Pulse Forward Current*1	I <sub>FP</sub>	500	mA
Reverse Voltage	V <sub>R</sub>	5	V
Power Dissipation	P <sub>D</sub>	1300	mW
Junction Temperature	T <sub>J</sub>	125	°C
Operating Temperature	T <sub>OPR</sub>	-40 ~ +105	°C
Storage Temperature	T <sub>STG</sub>	-40 ~ +120	°C
Soldering Temperature	T <sub>SOL</sub>	260 ± 5°C for 5 seconds	

\*Note:

1. 1/10 Duty Cycle at 1KHz

VioLED International Inc.

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**Electro-Optical Characteristics. (Ta=25°C)**

Rank	P/N	$\lambda_p$ (nm)*1		Po (mW)*2		Vf (V)*3		Viewing Angle 2 $\theta$ 1/2	Current (mA)
		Min.	Max.	Min.	Max.	Min.	Max.		
1	440-1WUE	435	445	400	500	3.0	4.0	140	350

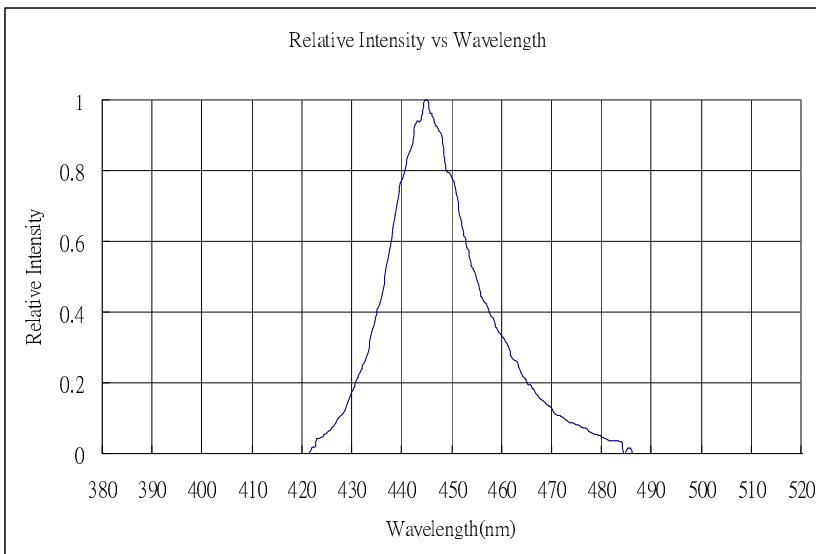
\*Note:

1. Peak wavelength measurement allowance is  $\pm 1$ nm
2. Optical output measurement allowance is  $\pm 10\%$
3. Forward voltage measurement allowance is  $\pm 0.1$ V

**Materials.**

Item	Material
Die	InGaN based
Zener diode	Si
Lead-frame	Au Plating Copper Alloy
Bonding wire	Au
Encapsulation	Silicone Resin

**Typical Spectrum.**

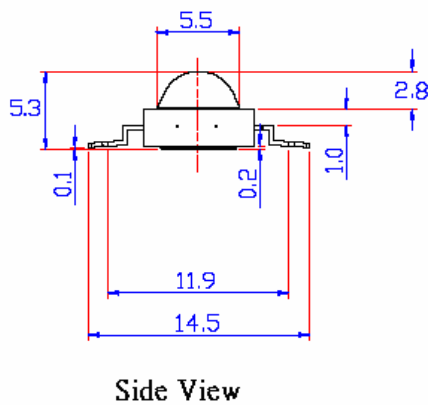
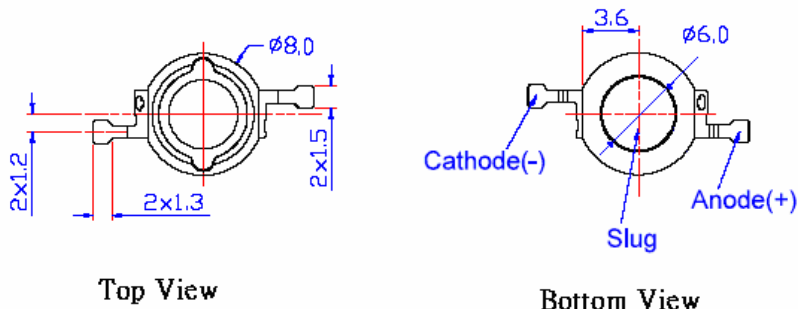


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**Dimension Figures.**

1. Unit: mm
2. Tolerance:  $\pm 0.2\text{mm}$
3. Drawing:



**Note:**

1. The anode side of the device is denoted by a hole in the lead frame.
2. The slug of the device is no electrically neutral.

**Circuit Diagram**

