

UV LED EMITTER – 390nm 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 _F	350	mA
Peak Pulse Forward Current*1	I _{FP}	500	mA
Reverse Voltage	V _R	5	V
Power Dissipation	P _D	1300	mW
Junction Temperature	T _J	125	°C
Operating Temperature	T _{OPR}	-40 ~ +105	°C
Storage Temperature	T _{STG}	-40 ~ +120	°C
Soldering Temperature	T _{SOL}	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	λ_p (nm)*1		Po (mW)*2		Vf (V)*3		Viewing Angle 2 θ 1/2	Current (mA)
		Min.	Max.	Min.	Max.	Min.	Max.		
1	390-1WUE	385	395	200	300	3.0	4.0	140	350

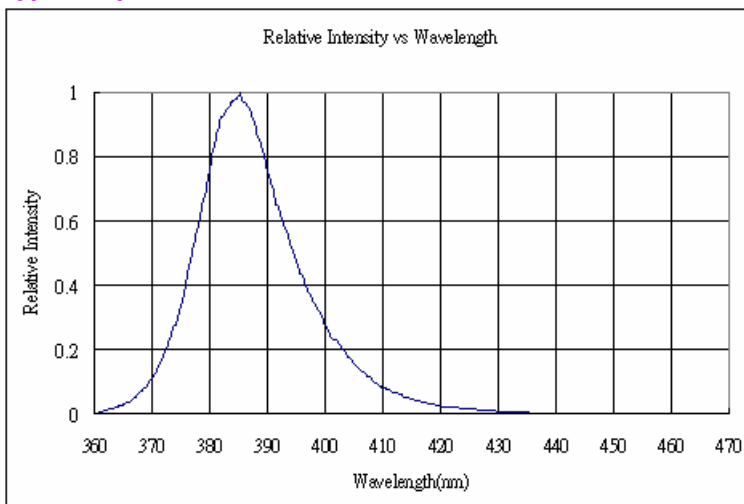
*Note:

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

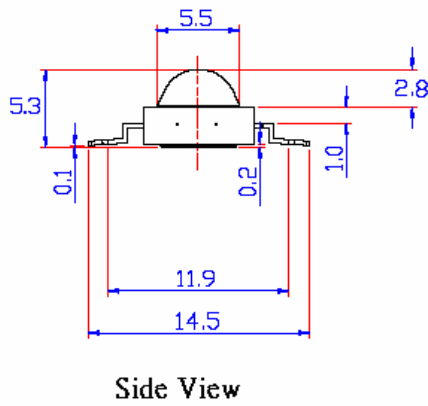
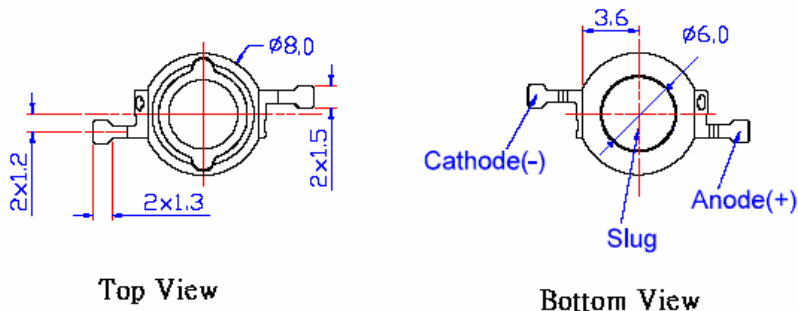


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Dimension Figures.

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

