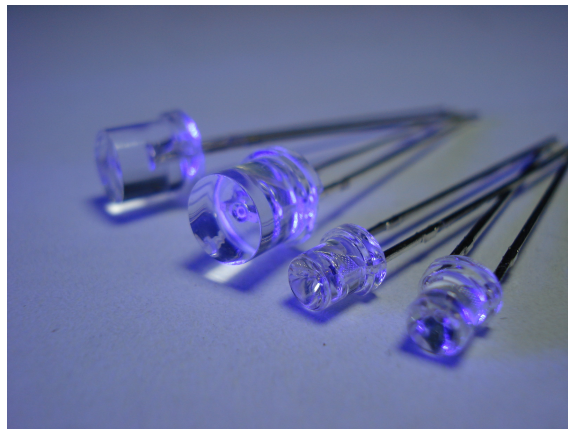


UV LED LAMP - 420nm Series

Product Pictures.



Product Applications.

Light sources for UV curing
Light sources for photocatalyst air cleaner / purifier
Fluorescence disclosing and verification
Chemical analysis equipment
Medical and biomedical applications
Hazardous materials detection.
Industrial emitters

Product Features.

Peak wavelength: typ. 420nm
Industry standard lead spacing
Superior ESD protective circuit
UV resistant special resin provides high reliability
Tight tolerance of +/- 5nm binning shipment
Low Voltage DC Operated
Lead(Pb)Free Product-RoHS Compliant

Absolute Maximum Ratings. (Ta=25°C)

Item	Symbol	Value	Unit
DC Forward Current	IF	20	mA
Peak Pulse Forward Current*1	IFP	100	mA
Allowable Reverse Current	IR	50	mA
Power Dissipation	PD	80	mW
Operating Temperature	TOPR	-40 ~ +85	°C
Storage Temperature	TSTG	-40 ~ +100	°C
Soldering Temperature	TSOL	260 ± 5°C for 5 seconds	

*Note:

1. IFP Conditions: Pulse Width $\leq$ 10msec, Duty $\leq$ 1/10

VioLED International Inc.

4F-2, No.427, Zhongshan N. Rd., Daya Dist., Taichung City 428, Taiwan.
TEL:886-4-25692507 FAX: 886-4-25691977 <http://www.violed.com.tw>

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

Item	Symbol	Condition	Value			Unit
			Min.	Typ.	Max.	
Forward Voltage*1	VF	IF=20mA	3.2	-	4.2	V
Peak Wavelength*2	λ_p	IF=20mA	415	420	425	nm
Optical Power Output *3	PO	IF=20mA	10	-	16	mW
Reverse (Leakage) Current	IR	VR = 5V	<50			uA
Viewing Angle	2 θ 1/2	IF=20mA	20 / 15 / 90			deg.

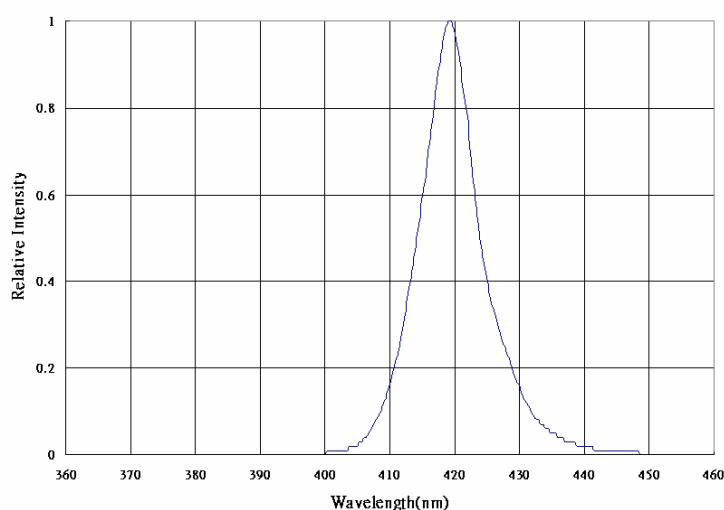
*Note:

1. Forward voltage measurement allowance is $\pm 0.2V$
2. Peak wavelength measurement allowance is $\pm 2nm$
3. Optical output measurement allowance is $\pm 10\%$
4. Viewing Angle: 3mm Round Type: 20° / 5mm Round Type:15° / 5mm Cylinder Type: 90°.

Materials.

Item	Material
Die	InGaN based
Zener diode	Si
Lead-frame	Ag Plating, Iron Alloy
Bonding wire	Au
Encapsulation	UV-resistant epoxy resin (Water Clear)

Typical Spectrum.



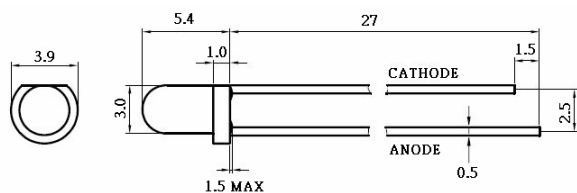
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Dimension Figures.

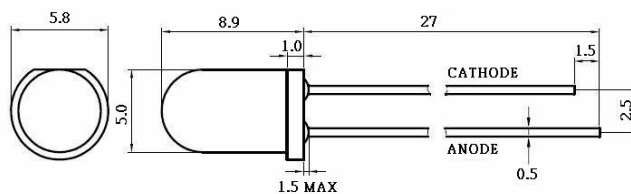
(1) 420-3R20

(420±5nm / 3mm Round Type / 20 degree)



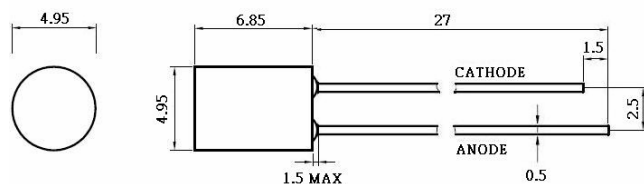
(2) 420-5R15

(420±5nm / 5mm Round Type / 15 degree)



(3) 420-5C90

(420±5nm / 5mm Cylinder Type / 90 degree)



*Notes:

1. Unit : mm
2. Tolerance: ±0.15mm

Circuit Diagram

