

Excellent Integrated System Limited

Stocking Distributor

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[Visual Communications Company, LLC](#)
[VAOL-5EUV8T4](#)

For any questions, you can email us directly:

sales@integrated-circuit.com

UV LED LAMP

VAOL-5EUV8T4

Feature

- Low Power Consumption
- I.C. compatible

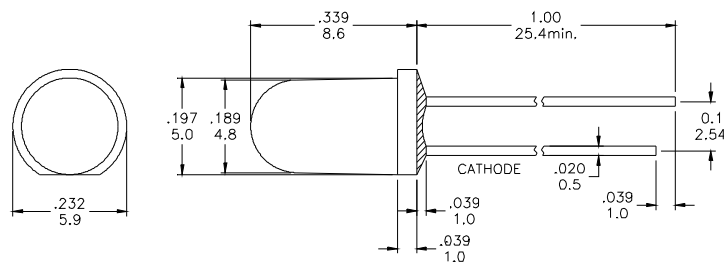
Applications

- Disinfection and Sterilization
- Adhesive Curing
- Leak Detection
- Authentication

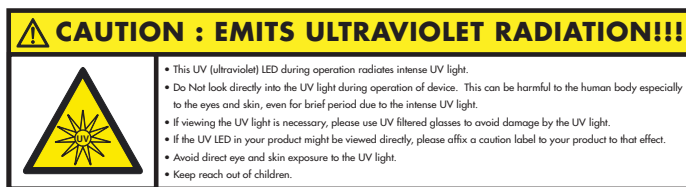
Description

- These LEDs are Based on InGaN Material Technology
- Emitted color: Purple (UV)
- Water Transparent Lens

Package Dimension



* Tolerance : $\pm \frac{0.01}{0.25}$ Unit : $\pm \frac{\text{inch}}{\text{mm}}$



Absolute Maximum Ratings at Ta=25°C

Symbol	Parameter	Max.	Unit
PD	Power Dissipation	120	mW
VR	Reverse Voltage	5	V
IAF	Average Forward Current	30	mA
IPF	Peak Forward Current (Duty=0.1, 1kHz)	100	mA
—	Derating Linear Form 25°C	0.4	mA/°C
Topr	Operating Temperature Range	-20 to + 80	°C
Tstg	Storage Temperature Range	-20 to + 100	°C
Lead Soldering Temperature [1.6mm (0.063inch) From Body] 260°C For 5 Seconds.			

Electrical / Optical Characteristics and Curves at Ta=25°C

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Unit
VF	Forward Voltage	IF= 20 mA	2.8	3.0	3.6	V
IR	Reverse Current	VR= 5 V			50	μA
$\Delta \theta$	Half Intensity Angle	IF= 20 mA	--	15	--	Deg.
IV	Luminous Intensity	IF= 20 mA	--	100	--	mcd.
λp	Peak Wavelength	IF= 20 mA	380	385	--	nm

Electrical Characteristics at Ta=25°C

Symbol	Iv		VF		λ_p	
Parameter	Luminous Intensity		Forward Voltage		Peak Wavelength	
Condition	IF=20mA		IF=20mA		IF=20mA	
Unit	mcd		V		nm	
Binning	Grade	Range	Grade	Range	Grade	Range
	BIN8	65~90	P0	2.8~3.0	U2	380~385
	BIN 9	90~125	P1	3.0~3.2	U3	385~390
			P2	3.2~3.4		
			P3	3.4~3.6		

Intensity: Tolerance of minimum and maximum = $\pm 15\%$

Vf: Tolerance of minimum and maximum = $\pm 0.05v$

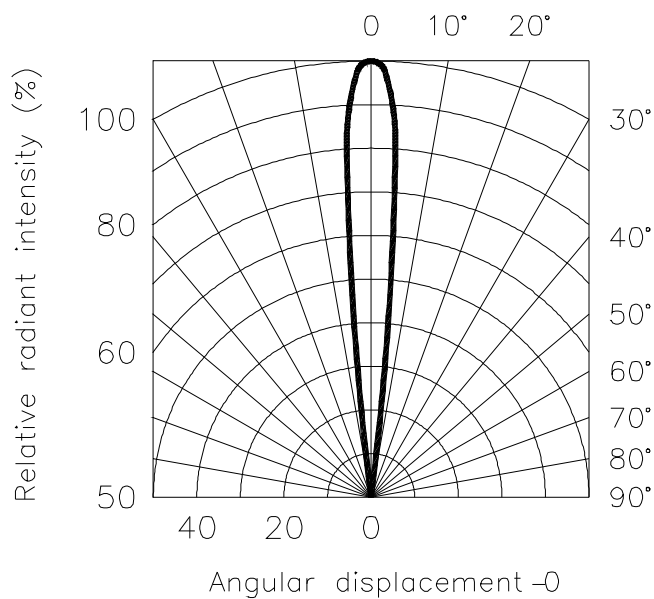
NOTE:

1. Static electricity and surge damages the LED. It is recommend to use a anti-static wrist band or anti-electrostatic glove when handing the LEDs. All devices, equipment and machinery must be properly grounded.

Radiation Diagram

IF=20 mA 50% Power Angle Angle =15°

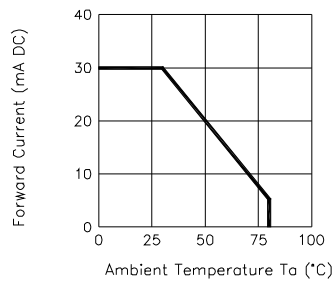
Radiation Diagram



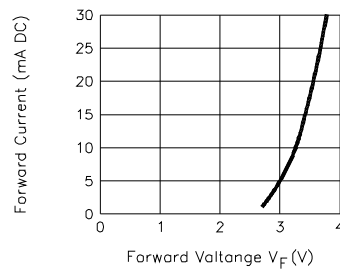
UV

Typical Electro-optical Characteristic Curves (25°C Free Air Temperature Unless Otherwise Specified)

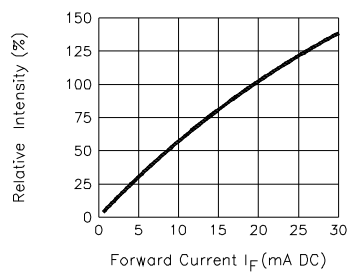
Forward Current
 Vs. Ambient Temperature



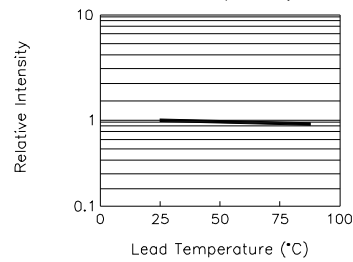
Forward Current
 Vs. Forward Voltage



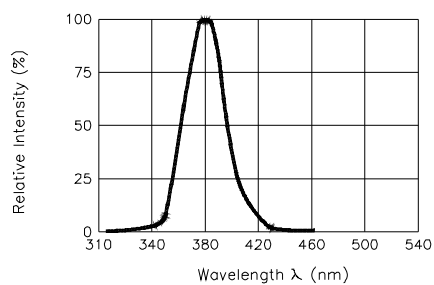
Relative Intensity
 Vs. Forward Current



Relative Intensity
 Vs. Lead Temperature
 (Pulsed 20 mA; 300us pulse,
 10ms period)



Relative Intensity Vs. Wavelength



Peak Forward Voltage
 Vs. Forward Current
 (100us test pulse,
 1% duty cycle)

