### **UV LED LAMP**

#### VAOL-5EUV8T4

#### **Feature**

- Low Power Consumption
- I.C. compatible

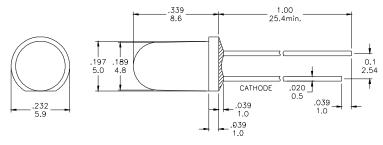
### **Applications**

- 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:  $\pm \frac{\text{inch}}{\text{mm}}$ 

### **↑** CAUTION: EMITS ULTRAVIOLET RADIATION!!!



- This UV (ultraviolet) LED during operation radiates intense UV light.
- Do Not look directly into the UV light during operation of device. This can be harmful to the human body especial
  to the eyes and skin, even for brief period due to the intense UV light.
- to the eyes and skin, even for brief period due to the intense UV light.

   If viewing the UV light is necessary, please use UV filtered glasses to avoid damage by the UV light
- If the UV LED in your product might be viewed directly, please affix a caution label to your product to that effect
- Avoid direct eye and skin exposure to the UV light.
- Keep reach out of children.

# 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.	Тур.	Max.	Unit
VF	Forward Voltage	IF= 20 mA	2.8	3.0	3.6	V
IR	Reverse Current	VR = 5 V			50	μΑ
Δθ	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		λp	
Parameter	Luminous Intensity		Forward Voltage		Peak Wavelength	
Condition	IF=20mA		IF=20mA		IF=20mA	
Unit		mcd	V		nm	
	Grade	Range	Grade	Range	Grade	Range
	BIN8	65~90	Р0	2.8~3.0	U2	380~385
	BIN 9	90~125	P1	3.0~3.2	U3	385~390
Binning			P2	3.2~3.4		
			Р3	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 10° 20° Relative radiant intensity (%) 100 30° 80 40° 50° 60 60° 70° 80° 50 90° 40 20 ()

Angular displacement -0



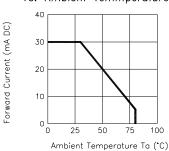




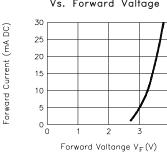
#### UV

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

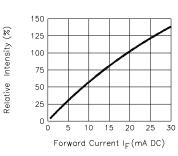
Forward Current Vs. Ambient Temmperature



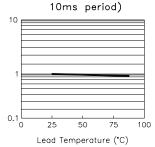
Forward Current Vs. Forward Valtage



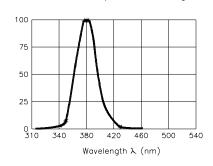
Relative Intensity Vs. Forward Current



Relative Intensity Vs. Lead Temperarture (Pulsed 20 mA; 300us pulse,

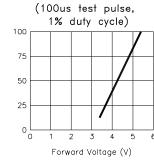


Relative Intensity Vs. Wavelength



Relative Intensity (%)

Peak Forward Voltage Vs. Forward Current (100us test pulse,





Relative Intensity



# **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Standard LEDs - Through Hole category:

Click to view products by Visual Communications Company manufacturer:

Other Similar products are found below:

LTL-10254W LTL-1214A LTL-3251A LTL-4262N LTL-433P LTL-5234 LTL87HTBK LTW-87HD4B HLMP-EL30-PS0DD

1L0532V23G0TD001 NSPW500CS NTE30036 NTE30044 NTE30059 NTE3020 LD CQDP-1U3U-W5-1-K LO566UHR3-70G-A3

LP379PPG1C0G0300001 SLX-LX3044GD SLX-LX3044ID SLX-LX3044YD 1.90690.3330000 SSS-LX4673ID-410B 1L0532Y24I0TD001

264-7SYGD/S530-E2 HLMP1385 LTL-10224W LTL-1224A LTL-1234A LTL-2251AT LTL-307YE-012 LTL-403HR LTL-4222 LU7-E
B 4380H1 TLHY44K1L2 HLMP-3962-F0002 HLMP-GG15-R0000 323-2SURD/S530-A3 L53SRC/E-Z L-7679C1ZGC 4302T1-5V

4306D23 4363D1/5 WP1503SRC/J4 WP153GDT WP153YDT WP1543SGC WP1543SURC WP53MGD