

**Feature**

- Low Power Consumption
- I.C. compatible

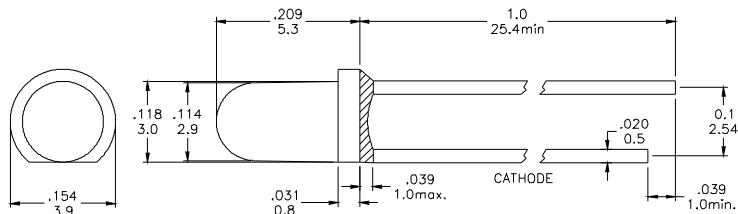
**Applications**

- 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			100	μA
$\Delta \theta$	Half Intensity Angle	IF = 20 mA	--	15	--	Deg.
IV	Luminous Intensity	IF = 20 mA	--	72	--	md.
$\lambda p$	Peak Wavelength	IF = 20 mA	380	385	--	nm

### Electrical Characteristics at Ta=25°C

Symbol	I <sub>v</sub>		V <sub>F</sub>		λ <sub>p</sub>	
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
	BIN7	45~65	P0	2.8~3.0	U2	380~385
	BIN8	65~90	P1	3.0~3.2	U3	385~390
			P2	3.2~3.4		
			P3	3.4~3.6		

Intensity: Tolerance of minimum and maximum = ± 15%

V<sub>f</sub>: Tolerance of minimum and maximum = ± 0.05v

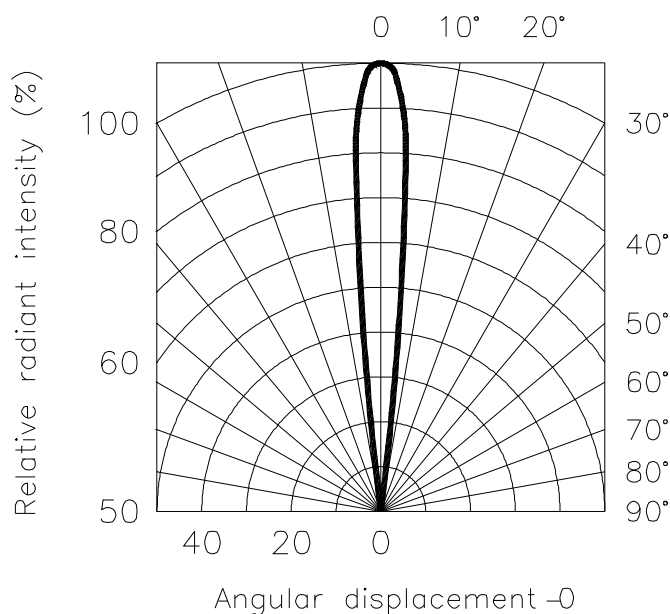
NOTE:

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°

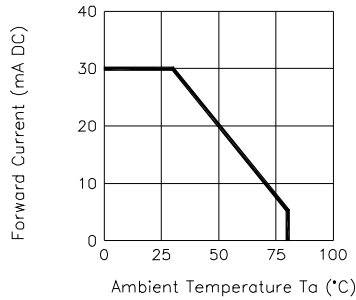
Radiation Diagram



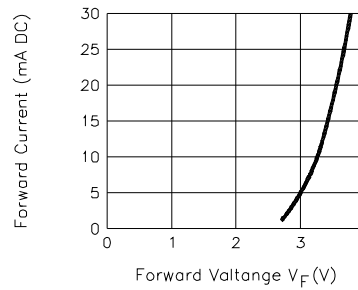
## UV

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

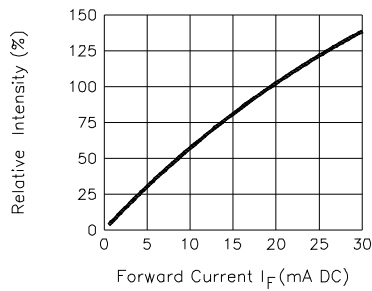
Forward Current  
Vs. Ambient Temperature



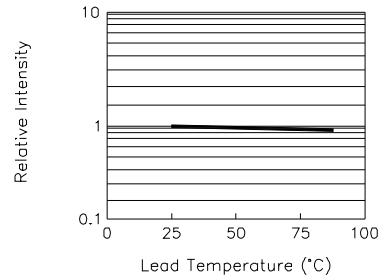
Forward Current  
Vs. Forward Voltage



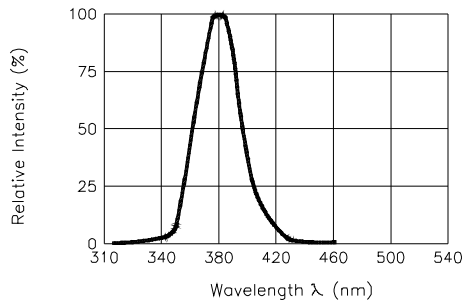
Relative Intensity  
Vs. Forward Current



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)

