

L200CUV405-12D

Ultra Violet

5mm, Flanged Cylindrical, 8.7mm Height
17° viewing angle

DWG BY:
BL / GP
10-17-06

CHK BY:
PL
08-08-07

QA:
—
— — — —

MFG:
—
— — — —

REVISION LTR: -
08-08-07

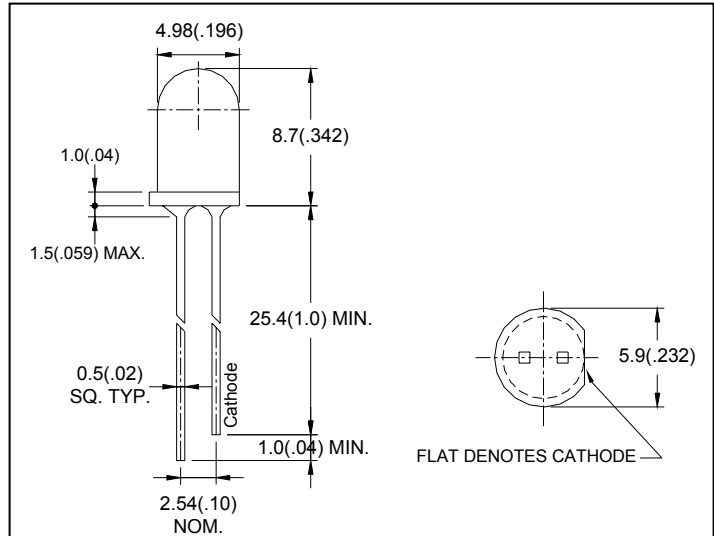
● **Features:**

1. Chip material: InGaN / SiC
2. Emitted color : Ultra Violet
3. Lens Appearance : Water Clear
4. Low power consumption.
5. High efficiency.
6. Versatile mounting on P.C. Board or panel.
7. Low current requirement.
8. 5mm diameter package
9. This product is RoHS compliant.

● **Applications:**

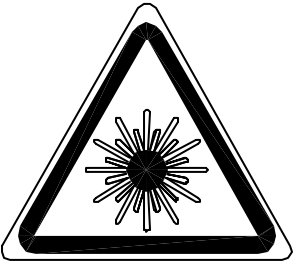
1. TV set
2. Monitor
3. Telephone
4. Computer
5. Circuit board

● **Package dimensions**



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25\text{mm}$ ($0.01''$) unless otherwise specified.
3. Lead spacing is measured where the leads emerge from the package.
4. Specifications are subject to change without notice.



! CAUTION

- This UV 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 eyes 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 exposure to UV light.
Keep out of reach of children.

● **Absolute maximum ratings(Ta=25°C)**

Parameter	Symbol	Rating	Unit
Power Dissipation	Pd	120	mW
Forward Current	I _F	30	mA
Peak Forward Current* ¹	I _{FP}	150	mA
Reverse Voltage	V _R	5	V
Operating Temperature	Topr	-40°C~80°C	
Storage Temperature	Tstg	-40°C~85°C	
Soldering Temperature	Tsol	260°C (for 5 seconds)	

*¹Condition for I_{FP} is pulse of 1/10 duty and 0.1msec width.

● **Electrical and optical characteristics(Ta=25°C)**

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F=20mA$	-	3.8	4.0	V
Luminous Intensity	I_v	$I_F=20mA$	-	50	-	mcd
Reverse Current	I_R	$V_R=5V$	-	-	100	μA
Peak Wave Length	λ_p	$I_F=20mA$	-	405	-	nm
Dominant Wave Length	λ_d	$I_F=20mA$	-	420	-	nm
Spectral Line Half-width	$\Delta \lambda$	$I_F=20mA$	-	15	-	nm
Viewing Angle	$2\theta_{1/2}$	$I_F=20mA$	-	17	-	deg
Radiant Intensity		$I_F=20mA$	-	57	-	mW/sr
Chromaticity Coordinates	X	$I_F=20mA$	-	0.17	-	
	Y		-	0.006	-	

● **Typical electro-optical characteristics curves**

Fig.1 Relative intensity vs. Wavelength

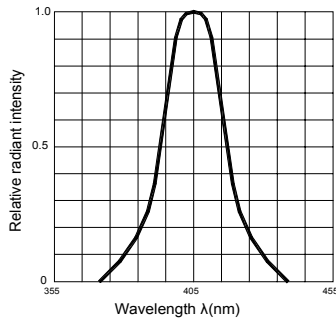


Fig.2 Forward current derating curve vs. Ambient temperature

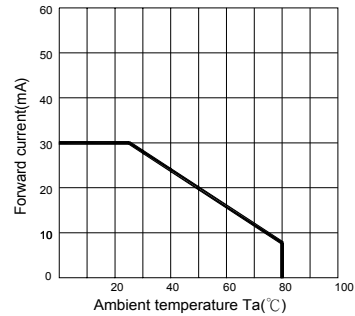


Fig.3 Forward current vs. Forward voltage

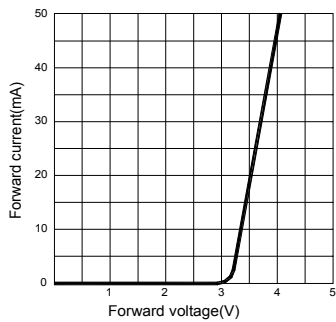


Fig.4 Relative luminous intensity vs. Ambient temperature

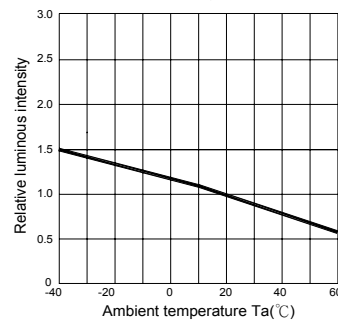


Fig.5 Relative luminous intensity vs. Forward current

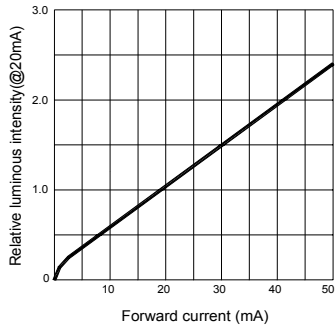
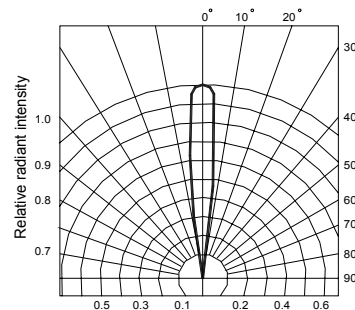


Fig.6 Radiation diagram



● **Bin Limits**

1. Intensity Bin Limits (At $I_F=20\text{mA}$)

Bin Code	Min. (mcd)	Max. (mcd)
:	:	:
Q	82	160
R	120	240
S	180	360
T	280	550
U	410	820
:	:	:

2. Color Bin Limits (At $I_F=20\text{mA}$) : Dominant Wave Length $\lambda_d(\text{nm})$

Bin Code	Min. (nm)	Max. (nm)
3	399	406
4	404	411

● Bin : x x

