

CDLE-038-106 Device Number: REV.:

5.0mm Round Type LED Lamps

PART NO.: 383-2UBC/C470 ECN: Page: 1/4

#### Features:

- Choice of various viewing angles
- Available on tape and reel.
- Reliable and robust

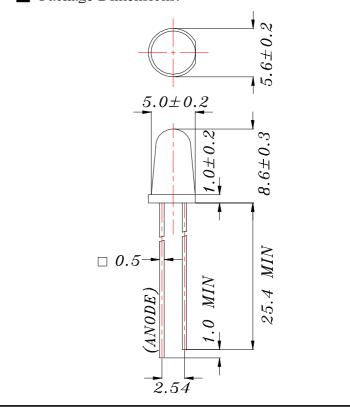
### Descriptions:

- The series is specially designed for applications requiring higher brightness
- The led lamps are available with different colors, intensities,

### Applications:

- TV set
- Monitor
- Telephone
- Computer

# ■ Package Dimensions:



#### Notes:

- 1. All dimensions are in millimeters.
- 2. An epoxy meniscus may extend about 1.5mm(0.059") down to the lead.
- 3. Tolerances unless Dimension  $\pm 0.25$ mm.

PART NO.		Chip	Lang Color	
PART NO.	Material	Emitted Color	Lens Color	
383-2UBC/C470	InGaN/SiC	Blue	Water Clear	

Office: 7C Building, Lian Hua Port Industrial District, Lian Hua Shan Bonded Pricessing Zone Pan Yu, Guang Zhou, China

TEL.: (020)84860913,84860914

FAX: (020)84860600 http://www.everlight.com



Device Number:	CDLE-038-106	REV.:	2

5.0mm Round Type LED Lamps

PART NO.:	383-2UBC/C470	ECN:	Page:	2/4
_				

### ■ Absolute Maximum Ratings at $Ta = 25^{\circ}C$

Parameter	Symbol	Rating	Unit
Forward Current	IF	30	mA
Operating Temperature	Topr	-40 to +85	$^{\circ}\!\mathbb{C}$
Storage Temperature	Tstg	-40 to +100	$^{\circ}\!\mathbb{C}$
Soldering Temperature	Tsol	$260 \pm 5$	$^{\circ}\!\mathbb{C}$
Electrostatic Discharge	ESD	1000	V
Power Dissipation	Pd	120	mW
Peak Forward Current(Duty 1/10 @ 1KHz)	IF(Peak)	100	mA
Reverse Voltage	Vr	5	V

## ■ Electronic Optical Characteristics:

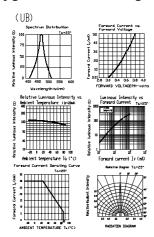
Parameter	Symbol	Min.	Тур.	Max.	Unit	Condition
Luminous Intensity	Iv	400	800	/	mcd	IF= 20 mA
Viewing Angle	2 θ 1/2	/	6	/	deg	IF= 20 mA
Peak Wavelength	λρ	/	468	/	nm	IF= 20 mA
Dominant Wavelength	λd	/	470	/	nm	IF= 20 mA
Spectrum Radiation Bandwidth	Δλ	/	26	/	nm	IF= 20 mA
Forward Voltage	VF		3.5	4.3	V	IF= 20 mA
Reverse Current	Ir	/	/	50	μΑ	VR= 5 V



Device Number: CDLE-038-106 REV.: 2

5.0mm Round Type LED Lamps

■ Typical Electro-Optical Characteristic Curves:





Device	Number:	CDLE-038-106	REV.:	2

5.0mm Round Type LED Lamps

PART NO.:	383-2UBC/C470	ECN:	Page:	4/4

### ■ Reliability test items and conditions:

NO	Item	Test Conditions	Test Hours/Cycle		Ac/Re
1	Solder Heat	TEMP: $260^{\circ}$ C ± 5 $^{\circ}$ C	5 SEC	76 PCS	0/1
2	Temperature Cycle	H: +85°C 30min ∫ 5 min L: -55°C 30min	50 CYCLES	76 PCS	0/1
3	Thermal Shock	$H: +100^{\circ}C$ 5min $\int 10 \sec L: -10^{\circ}C$ 5min	50 CYCLES	76 PCS	0/1
4	High Temperature Storage	TEMP : 100℃	1000 HRS	76 PCS	0/1
5	Low Temperature Storage	TEMP: -55°C	1000 HRS	76 PCS	0/1
6	DC Operating Life	TEMP: $25^{\circ}$ C  IF = $20$ mA	1000 HRS	76 PCS	0/1
7	High Temperature / High Humidity	85℃ / 85% RH	1000 HRS	76 PCS	0/1