



EVERLIGHT ELECTRONICS CO.,LTD.

# DATA SHEET

PART NO. : 383-2UBC/C470

DATE : 2002/9/9

DEPARTMENT : CHR&D1

REVISION : 2

<b>RECEIVED</b>			
<input checked="" type="checkbox"/> MASS PRODUCTION			
<input type="checkbox"/> PRELIMINARY			
<input type="checkbox"/> CUSTOMER DESIGN			
DEVICE NUMBER :		CDLE-038-106	
PAGE :		4	
CUSTOMER	DESIGNER	CHECKER	APPROVER

<b>2</b>	<b>Revision Update</b>	<b>2002/9/9</b>
REV.	DESCRIPTION	RELEASE DATE

Office : 7C Building, Lian Hua Port Industrial District, Lian Hua Shan  
 Bonded Processing Zone Pan Yu, Guang Zhou, China  
 TEL. : (020)84860913,84860914  
 FAX : (020)84860600  
 http : //www.everlight.com



# EVERLIGHT ELECTRONICS CO.,LTD.

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

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

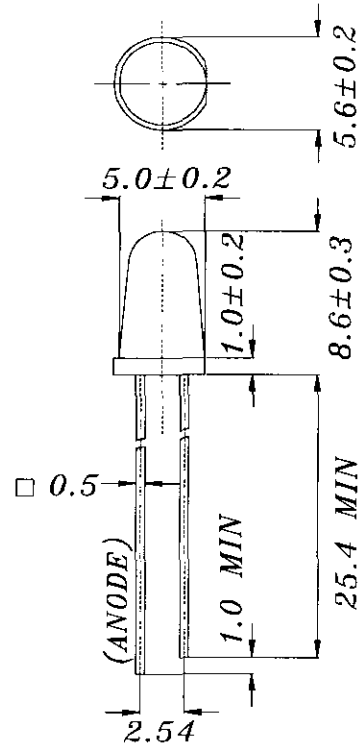
### ■ Descriptions :

- 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		Lens Color
	Material	Emitted Color	
383-2UBC/C470	InGaN/SiC	Blue	Water Clear

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

Parameter	Symbol	Rating	Unit
Forward Current	$I_F$	30	mA
Operating Temperature	$T_{opr}$	-40 to +85	°C
Storage Temperature	$T_{stg}$	-40 to +100	°C
Soldering Temperature	$T_{sol}$	$260 \pm 5$	°C
Electrostatic Discharge	ESD	1000	V
Power Dissipation	$P_d$	120	mW
Peak Forward Current(Duty 1/10 @ 1KHz)	$I_F(Peak)$	100	mA
Reverse Voltage	$V_R$	5	V

■ Electronic Optical Characteristics :

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	$I_v$	400	800	/	mcd	$I_F = 20\text{ mA}$
Viewing Angle	$2\theta 1/2$	/	6	/	deg	$I_F = 20\text{ mA}$
Peak Wavelength	$\lambda_p$	/	468	/	nm	$I_F = 20\text{ mA}$
Dominant Wavelength	$\lambda_d$	/	470	/	nm	$I_F = 20\text{ mA}$
Spectrum Radiation Bandwidth	$\Delta\lambda$	/	26	/	nm	$I_F = 20\text{ mA}$
Forward Voltage	$V_F$	/	3.5	4.3	V	$I_F = 20\text{ mA}$
Reverse Current	$I_R$	/	/	50	$\mu A$	$V_R = 5\text{ V}$



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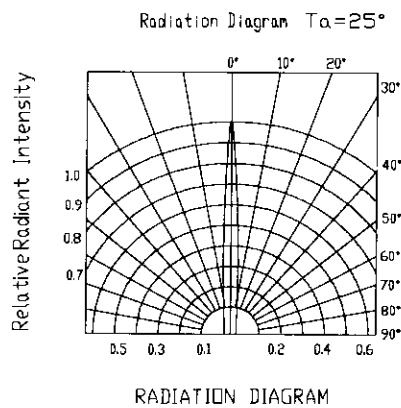
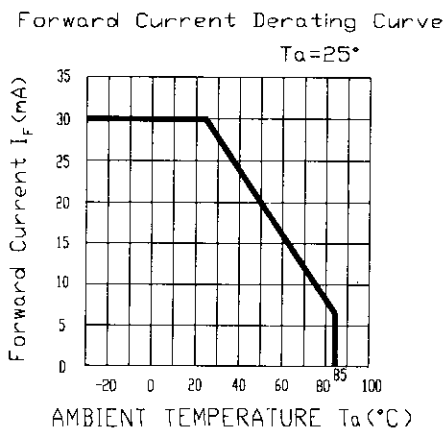
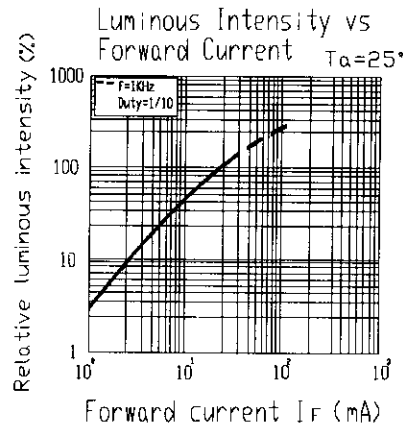
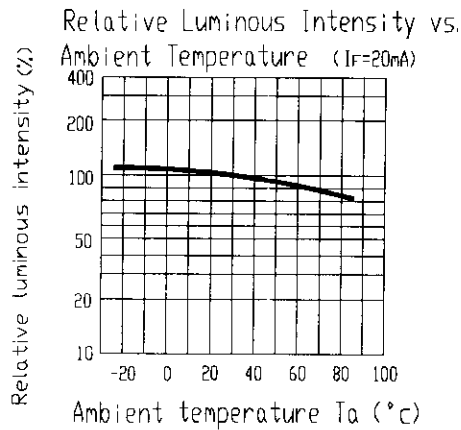
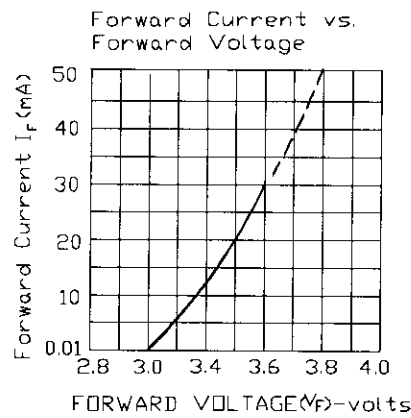
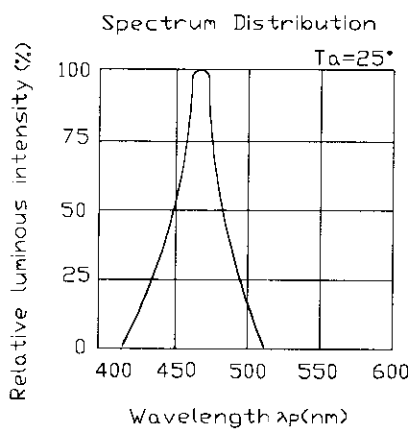
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## Typical Electro-Optical Characteristic Curves:

(UB)





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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°C ± 5 °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°C 5min § 10 sec L : -10°C 5min	50 CYCLES	76 PCS	0/1
4	High Temperature Storage	TEMP : 100°C	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°C If = 20mA	1000 HRS	76 PCS	0/1
7	High Temperature / High Humidity	85°C / 85% RH	1000 HRS	76 PCS	0/1