



EVERLIGHT ELECTRONICS CO.,LTD.


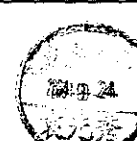

DATA SHEET

PART NO. : 594SUBC/C470/S400-A4

DATE : 2004/9/20

DEPARTMENT : CHR&D1

REVISION : 1

RECEIVED			
<input checked="" type="checkbox"/> MASS PRODUCTION			
<input type="checkbox"/> PRELIMINARY			
<input type="checkbox"/> CUSTOMER DESIGN			
DEVICE NUMBER : CDLE-059-069			
PAGE : 6			
CUSTOMER	DESIGNER	CHECKER	APPROVER
	 恒光工程 2004.9.20. 奉蘭	 恒光工程 2004.9.21. 蔡元登	 恒光工程 2004.9.27. 蔡登位

REV.	DESCRIPTION	RELEASE DATE

OFFICE: 7C BUILDING, LIAN HUA PORT INDUSTRIAL DISTRICT, LIAN HUA SHAN

BONDED PRICESSING ZONE PAN YU, GUANG ZHU, CHINA

TEL. : (020)84860913,84860914

FAX : (020)84860600

[http : //www.everlight.com](http://www.everlight.com)

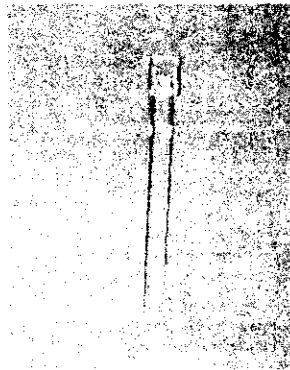


Technical Data Sheet
2.0*4.0mm Rectangular Type LED Lamps

594SUBC/C470/S400-A4

■ Features :

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



■ 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

PART NO.	Material	Emitted Color	Lens Color
594SUBC/C470/S400-A4	InGaN	Super Blue	Water Clear

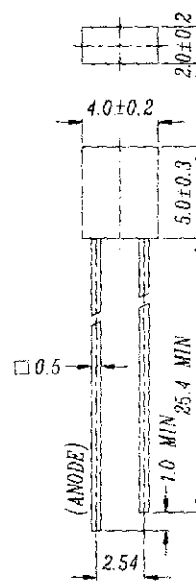


Technical Data Sheet

2.0*4.0mm Rectangular Type LED Lamps

594SUBC/C470/S400-A4

Package Dimensions



Notes: 1. All dimensions are in millimetres

2. An epoxy meniscus may extend about 1.5mm(0.059") down to the lead.

3. Tolerances unless Dimension ± 0.25 mm.

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

Parameter	Symbol	Rating	Unit
Forward Current	I_F	25	mA
Operating Temperature	T_{opr}	-40 to +85	$^\circ\text{C}$
Storage Temperature	T_{stg}	-40 to +100	$^\circ\text{C}$
Electrostatic Discharge	ESD	150	V
Soldering Temperature	T_{sol}	260 ± 5	$^\circ\text{C}$
Power Dissipation	P_d	120	mW
Peak Forward Current	$I_F(\text{Peak})$	100	mA
Reverse Voltage	V_R	5	V

Note: *1: I_{FP} Conditions --Pulse Width $\leq 1\text{msec}$ and Duty $\leq 1/10$.

*2: Soldering time ≤ 5 seconds.



Technical Data Sheet
2.0*4.0mm Rectangular Type LED Lamps

594SUBC/C470/S400-A4

Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	VF	I _F = 20 mA	/	3.4	4.0	V
Reverse Current	IR	V _R = 5 V	/	/	50	μA
Luminous Intensity	I _v	I _F = 20 mA	40	63	/	mcd
Viewing Angle	2θ 1/2	I _F = 20 mA	/	100	/	deg
Peak Wavelength	λ _p	I _F = 20 mA	/	468	/	nm
Dominant Wavelength	λ _d	I _F = 20 mA	/	470	/	nm
Spectrum Radiation Bandwidth	Δλ	I _F = 20 mA	/	35	/	nm



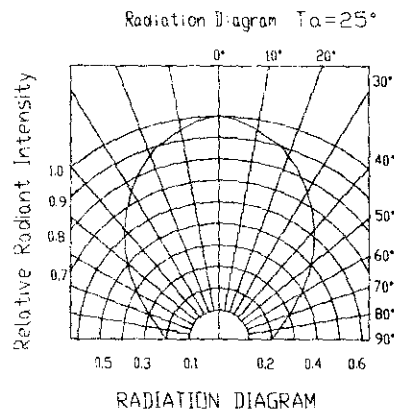
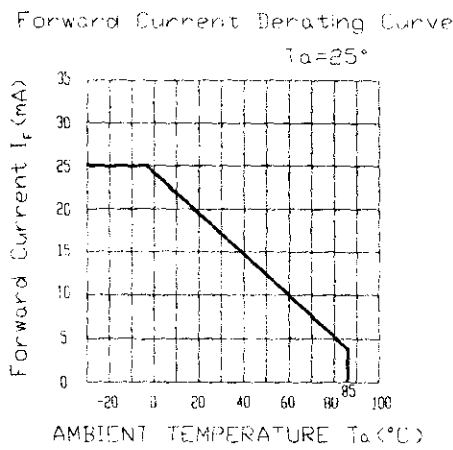
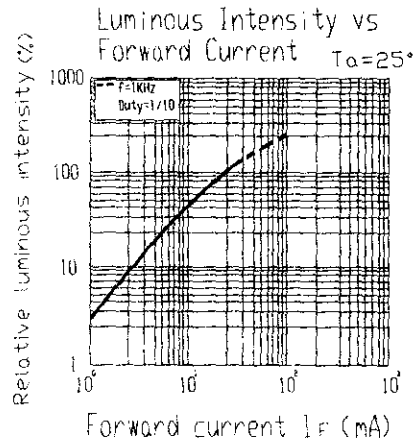
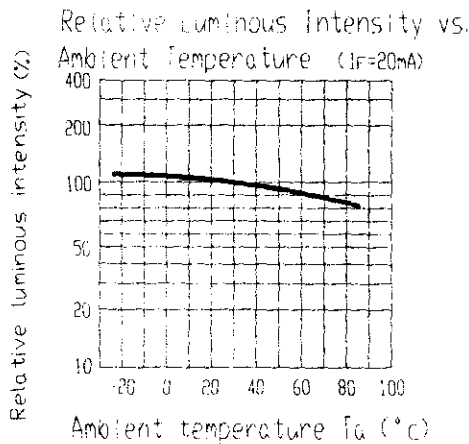
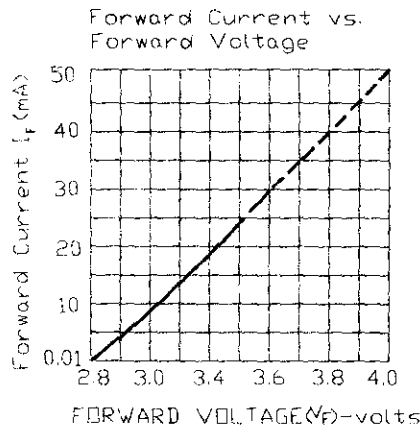
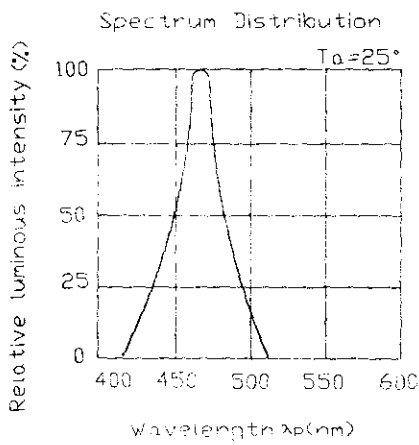
Technical Data Sheet

2.0*4.0mm Rectangular Type LED Lamps

594SUBC/C470/S400-A4

Typical Electro-Optical Characteristic Curves:

(SUB)





Technical Data Sheet
2.0*4.0mm Rectangular Type LED Lamps

594SUBC/C470/S400-A4

■ Reliability test items and conditions:

NO	Item	Test Conditions	Test Hours/Cycle	Sample size	Ac/Re
1	Solder Heat	TEMP : 260°C ± 5 °C	10 SEC	76 PCS	0/1
2	Temperature Cycle	H : +100°C 15min ∫ 5 min L : -40°C 15min	300 CYCLES	76 PCS	0/1
3	Thermal Shock	H : +100°C 5min ∫ 10 sec L : -10°C 5min	300 CYCLES	76 PCS	0/1
4	High Temperature Storage	TEMP : 100°C	1000 HRS	76 PCS	0/1
5	Low Temperature Storage	TEMP : -40°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



Technical Data Sheet
2.0*4.0mm Rectangular Type LED Lamps

594SUBC/C470/S400-A4

Packing Quantity Specification

- 1.1000PCS/1Bag , 4Bags/1Box
- 2.10Boxes/1Carton

Label Form Specification



CPN:
P/N:



594SUBC/C470/S400-A4

QTY:



CAT:
HUE:
REF:

LOT NO: EL



- CPN: Customer's Production Number
- P/N : Production Number
- QTY: Packing Quantity
- CAT: Ranks
- HUE: Peak Wavelength
- REF: Reference
- LOT No: Lot Number
- MADE IN TAIWAN: Production Place

MADE IN TAIWAN

Notes

1. Above specification may be changed without notice. EVERLIGHT will reserve authority on material change for above specification.
2. When using this product, please observe the absolute maximum ratings and the instructions for using outlined in these specification sheets. EVERLIGHT assumes no responsibility for any damage resulting from use of the product which does not comply with the absolute maximum ratings and the instructions included in these specification sheets.
3. These specification sheets include materials protected under copyright of EVERLIGHT corporation. Please don't reproduce or cause anyone to reproduce them without EVERLIGHT' s consent.

EVERLIGHT ELECTRONICS CO., LTD. Tel: 886-2-2267-2000, 2267-9936
Office: No 25, Lane 76, Sec 3, Chung Yang Rd, Fax: 886-2267-6244, 2267-6189, 2267-6306
Tucheng, Taipei 236, Taiwan, R.O.C http://www.everlight.com