



EVERLIGHT ELECTRONICS CO.,LTD.

DATA SHEET

PART NO. : 204-10SUBC/S400-A4

DATE : 2004/5/13

DEPARTMENT : CHR&D1

REVISION : 1

RECEIVED			
<input checked="" type="checkbox"/> MASS PRODUCTION			
<input type="checkbox"/> PRELIMINARY			
<input type="checkbox"/> CUSTOMER DESIGN			
DEVICE NUMBER : CDLE-020-703			
PAGE : 6			
CUSTOMER	DESIGNER	CHECKER	APPROVER

REV.	DESCRIPTION	RELEASE DATE

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Technical Data Sheet

3.0mm Round Type LED Lamps

204-10SUBC/S400-A4

■ 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

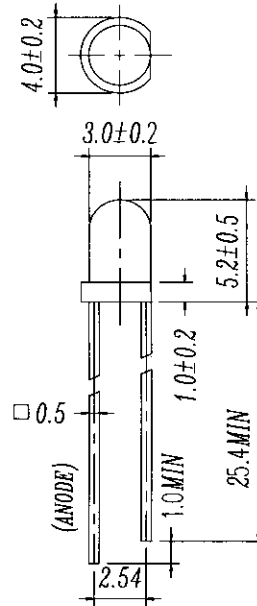
PART NO.	Material	Emitted Color	Lens Color
204-10SUBC/S400-A4	InGaN	Super Blue	Water Clear

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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 $\pm 0.25\text{mm}$.

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.



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Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V _F	I _F = 20 mA	/	3.4	4.0	V
Reverse Current	I _R	V _R = 5 V	/	/	50	μA
Luminous Intensity	I _v	I _F = 20 mA	400	800	/	mcd
Viewing Angle	2θ 1/2	I _F = 20 mA	/	20	/	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



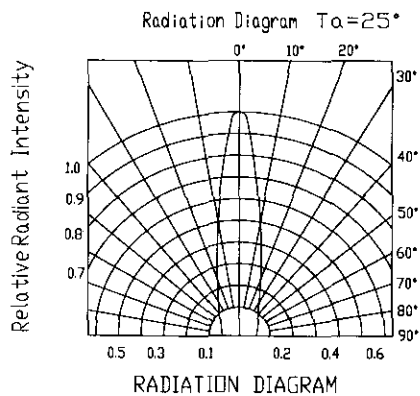
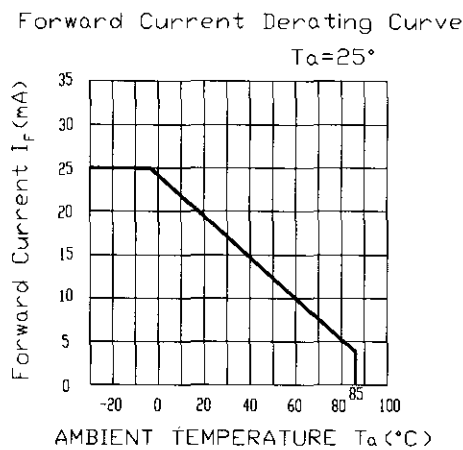
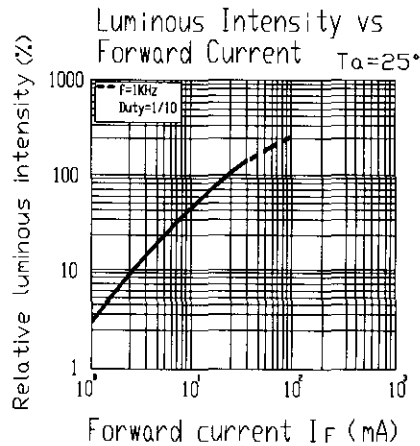
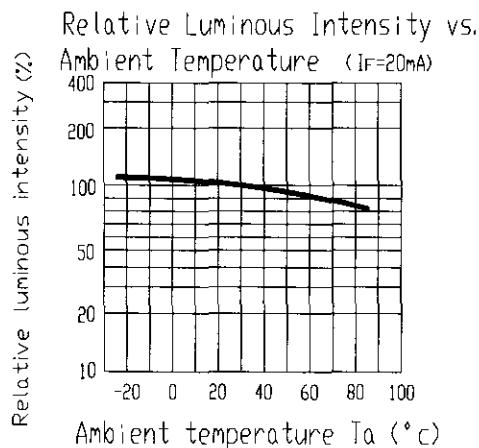
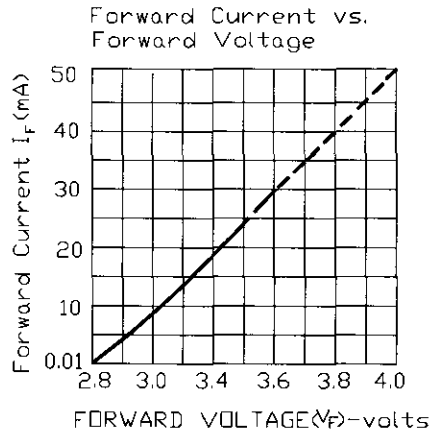
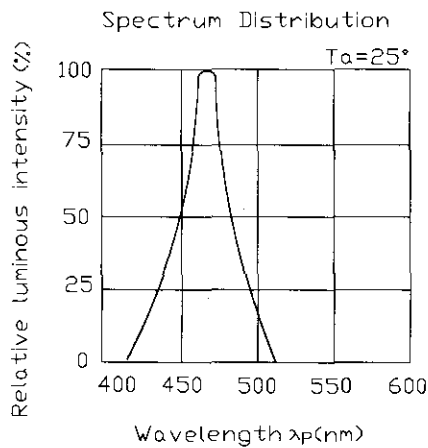
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Typical Electro-Optical Characteristic Curves:

(SUB)





Technical Data Sheet
3.0mm Round Type LED Lamps

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■ 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

