



EVERLIGHT ELECTRONICS CO.,LTD.

DATA SHEET

PART NO. : 333-2SUGC/S400-A4

DATE : 2005/8/8

DEPARTMENT : CHR&D1

REVISION : 2

RECEIVED			
<input checked="" type="checkbox"/> MASS PRODUCTION			
<input type="checkbox"/> PRELIMINARY			
<input type="checkbox"/> CUSTOMER DESIGN			
DEVICE NUMBER :		CDLE-033-1365	
PAGE :		6	
CUSTOMER	DESIGNER	CHECKER	APPROVER

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

5.0mm Round Type LED Lamps

333-2SUGC/S400-A4

■ Features :

- Choice of various viewing angles
- Available on tape and reel.
- Reliable and robust
- Pb free
- The product itself will remain within RoHS compliant version.



■ 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

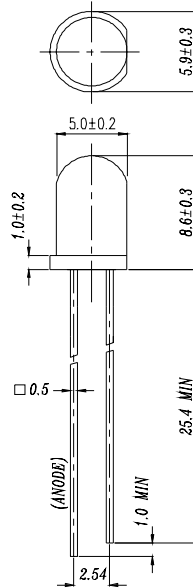
PART NO.	Material	Emitted Color	Lens Color
333-2SUGC/S400-A4	InGaN	Super Green	Water Clear

Technical Data Sheet

5.0mm Round Type LED Lamps

333-2SUGC/S400-A4

Package Dimensions



- Notes:**
1. All dimensions are in millimetres
 2. The height of flange must be less than 1.5mm(0.059").
 3. Without special declared,the tolerance is ±0.25mm.

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Rating	Unit
Forward Current	IF	50	mA
Operating Temperature	Topr	-40 to +85	°C
Storage Temperature	Tstg	-40 to +100	°C
Soldering Temperature	Tsol	260 ± 5	°C
Electrostatic Discharge	ESD	150	V
Power Dissipation	Pd	110	mW
Peak Forward Current	IF(Peak)	100	mA
Reverse Voltage	VR	5	V

Note: *1:IFP Conditions --Pulse Width ≤ 1msec and Duty ≤ 1/10.

*2:Soldering time ≤ 5 seconds.



Technical Data Sheet
5.0mm Round Type LED Lamps

333-2SUGC/S400-A4

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	/	/	10	μA
Luminous Intensity	I _v	I _F = 20 mA	6300	10000	/	mcd
Viewing Angle	2θ 1/2	I _F = 20 mA	/	10	/	deg
Peak Wavelength	λ _p	I _F = 20 mA	/	525	/	nm
Dominant Wavelength	λ _d	I _F = 20 mA	/	530	/	nm
Spectrum Radiation Bandwidth	Δλ	I _F = 20 mA	/	35	/	nm



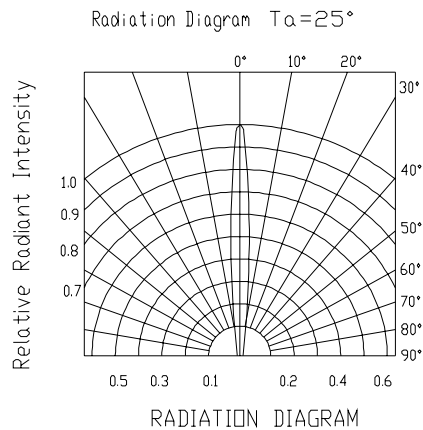
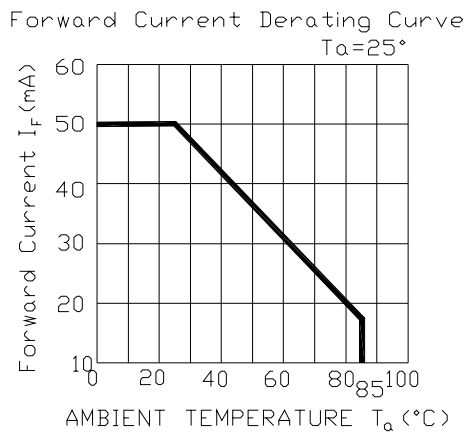
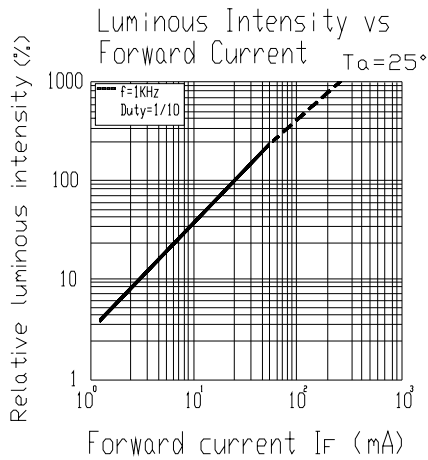
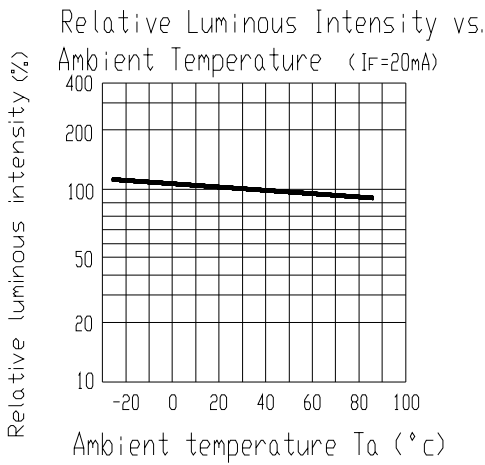
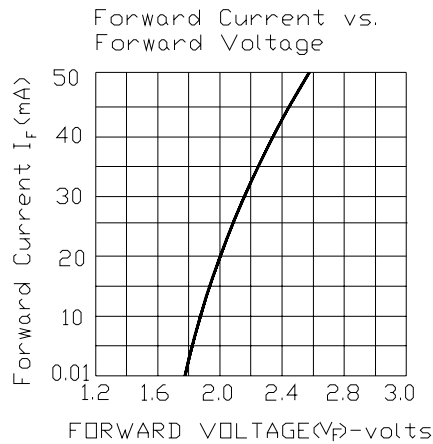
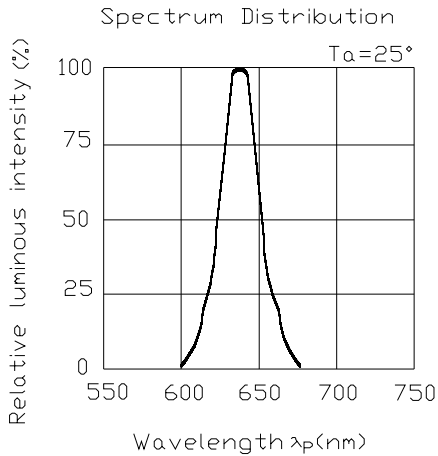
Technical Data Sheet

5.0mm Round Type LED Lamps

333-2SUGC/S400-A4

Typical Electro-Optical Characteristic Curves:

(SUR)





Technical Data Sheet

5.0mm Round Type LED Lamps

333-2SUGC/S400-A4

■ Reliability test items and conditions:

The reliability of products shall be satisfied with items listed below.

Confidence level : 97%

LTPD : 3%

NO	Item	Test Conditions	Test Hours/Cycle	Sample Size	Failure Judgment Criteria	Ac/Re
1	Solder Heat	TEMP : 260°C ± 5 °C	10 SEC	76 PCS	$I_v \leq I_{vt} * 0.5$ or $V_f \geq U$ or $V_f \leq L$	0/1
2	Temperature Cycle	H : +100°C 15min \int 5 min L : -40°C 15min	300 CYCLES	76 PCS		0/1
3	Thermal Shock	H : +100°C 5min \int 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

Note : I_{vt} : The test I_v value of the chip before the reliability test
 I_v : The test value of the chip that has completed the reliability test
 U : Upper Specification Limit
 L : Lower Specification Limit



Technical Data Sheet

5.0mm Round Type LED Lamps

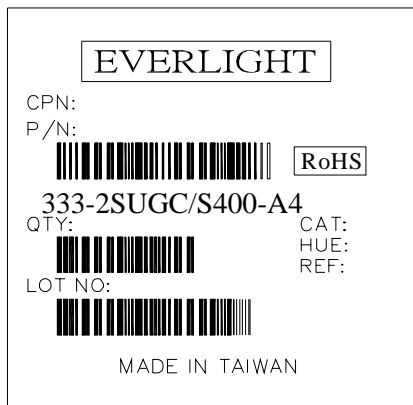
333-2SUGC/S400-A4

Packing Quantity Specification

1.500PCS/1Bag · 5Bags/1Box

2.10Boxes/1Carton

Label Form Specification



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

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 EVERI
Please don't reproduce or cause anyone to reproduce them without EVERLIGHT's consent.

EVERLIGHT ELECTRONICS CO., LTD.

Office: No 25, Lane 76, Sec 3, Chung Yang Rd,
Tucheng, Taipei 236, Taiwan, R.O.C

Tel: 886-2-2267-2000, 2267-9936

Fax: 886-2267-6244, 2267-6189, 2267-6306
<http://www.everlight.com>