

## Technical Data Sheet

# 3.0mm Round Type LED Lamps

#### 204-10SUGD/S400-A5

#### 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
204-10SUGD/S400-A5	InGaN	Brilliant Green	Green Diffused

EVERLIGHT ELECTRONICS CO.,LTD.

DLE-0001363

Device Number:

http://www.everlight.com Prepared date: 2009/5/4 Rev.: 1
Prepared by:

Page: 1 of 6 Li ming

0



## 204-10SUGD/S400-A5

Package Dimensions

4.0±0.3 3.0±0.2 4.0±0.3 1.0±0.2 1.0±0.2 1.0±0.2 1.0±0.3 2.5±0.3

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 $Ta = 25^{\circ}C$

Parameter	Symbol	Rating	Unit
Forward Current	IF	25	mA
Operating Temperature	Topr	-40 to +85	$^{\circ}\!\mathbb{C}$
Storage Temperature	Tstg	-40 to +100	$^{\circ}\!\mathbb{C}$
Soldering Temperature	Tsol	260	$^{\circ}\!\mathbb{C}$
Electrostatic Discharge	ESD	150	V
Power Dissipation	Pd	110	mW
Peak Forward Current	Ir(Peak)	100	mA
Reverse Voltage	VR	5	V

Note: \*1:Soldering time  $\leq$  5 seconds.

EVERLIGHT ELECTRONICS CO.,LTD. http://www.everlight.com Rev.: 1 Page: 2 of 6

Device Number: DLE-0001363 Prepared date: 2009/5/4 Prepared by: Li ming



## 204-10SUGD/S400-A5

## Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Condition	Min.	Тур.	Max.	Unit
Forward Voltage	VF	I <sub>F</sub> = 20 mA	/	3.4	4.0	V
Reverse Current	IR	$V_R$ = 5 $V$	/	/	50	μΑ
Luminous Intensity	Iv	I <sub>F</sub> = 20 mA	500	1000	/	mcd
Viewing Angle	2 <del>0</del> 1/2	I <sub>F</sub> = 20 mA	/	30	/	deg
Peak Wavelength	λρ	I <sub>F</sub> = 20 mA	/	525	/	nm
Dominant Wavelength	λd	I <sub>F</sub> = 20 mA	/	530	/	nm
Spectrum Radiation Bandwidth	Δλ	I <sub>F</sub> = 20 mA	/	35	/	nm

EVERLIGHT ELECTRONICS CO.,LTD. http://www.everlight.com Rev.: 1 Page: 3 of 6

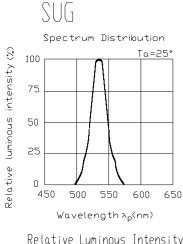
Device Number: DLE-0001363 Prepared date: 2009/5/4 Prepared by: Li ming

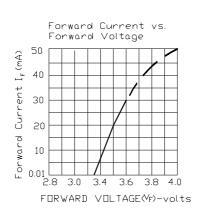


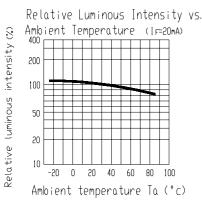
# Technical Data Sheet 3.0mm Round Type LED Lamps

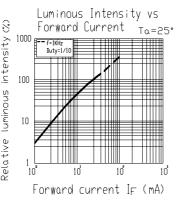
## 204-10SUGD/S400-A5

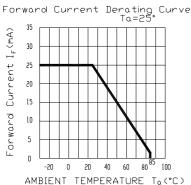
# Typical Electro-Optical Characteristic Curves:

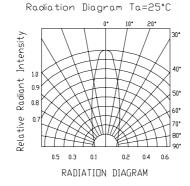












EVERLIGHT ELECTRONICS CO.,LTD. http://www.everlight.com Rev.: 1 Page: 4 of 6

Device Number: DLE-0001363 Prepared date: 2009/5/4 Prepared by: Li ming



# Technical Data Sheet

# 3.0mm Round Type LED Lamps

# 204-10SUGD/S400-A5

# 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: $260^{\circ}$ C ± 5 $^{\circ}$ C	10 SEC	76 PCS		0/1
2	Temperature Cycle	$H: +100^{\circ}C$ 15min $\int$ 5 min $L: -40^{\circ}C$ 15min	300 CYCLES	76 PCS		0/1
3	Thermal Shock	$H: +100^{\circ}C$ 5min $\int 10 \sec L: -10^{\circ}C$ 5min	300 CYCLES	76 PCS		0/1
4	High Temperature Storage	TEMP: 100℃	1000 HRS	76 PCS	$Iv \le Ivt*0.5$ or $Vf \ge U$ or $Vf \le L$	0/1
5	Low Temperature Storage	TEMP : -40°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

Note: Ivt: To test Iv value of the chip before the reliablility test

Iv: The test value of the chip that has completed the reliablility test

U: Upper Specification LimitL: Lower Specification Limit

EVERLIGHT ELECTRONICS CO.,L http://www.everlight.com Rev.: 1 Page: 5 of 6

Device Number: DLE-0001363 Prepared date: 2009/5/4 Prepared by: Li ming



#### Technical Data Sheet

#### 3.0mm Round Type LED Lamps

## 204-10SUGD/S400-A5

Packing Quantity Specification

1.1000PCS/1Bag , 4Bags/1Box

2.10Boxes/1Carton

Label Form Specification



CPN: Customer's Production Number

P/N: Production Number QTY: Packing Quantity

CAT: Ranks

HUE: Dominant Wavelength

REF: Reference

LOT No: Lot Number

#### 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 corporatio 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,

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

Fax: 886-2267-6244, 2267-6189, 2267-6306

Tucheng, Taipei 236, Taiwan, R.O.C

http://www.everlight.com

EVERLIGHT ELECTRONICS CO.,LTD. http://www.everlight.com Rev.: 1 Page: 6 of 6

Device Number: DLE-0001363 Prepared date: 2009/5/4 Prepared by: Li ming

# 单击下面可查看定价,库存,交付和生命周期等信息

>>Everlight(亿光)