

# DATA SHEET

PART NO.	:	A214B/SUR/S530-A3
DATE	:	2005/8/26
DEPARTMENT	:	CHR&D1

REVISION :

4

RECEIVED					
MASS PRO	ODUCTION				
☐ PRELIMIN	IARY				
	ER DESIGN				
DEVICE NUN	MBER:	CDAE-021-048			
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

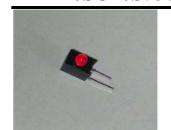
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# Technical Data Sheet 3.0mm Round Type LED Lamps

#### A214B/SUR/S530-A3



#### Features:

- Low power consumption
- High efficiency and low cost
- Good control and free combinations on the colors of LED lamps
- Good lock and easy to assembly
- Stackable and easy to assembly
- Stackable vertically and easy to assembly
- Versatile mounting on P.C board or panel
- Stackable horizontally and easy to assembly
- Pb free
- The product itself will remain within RoHS compliant version.

## Descriptions:

- ARRAY=Plastic Holder+Combinations of Lamps
- The array will easily mount the applicable lamps on any panel up to

#### Applications:

• 1.Used as indicators of indicating the Degree, Functions, Positions etc, in electronic instruments.

DADT NO	Chi	Long Colon	
PART NO.	Material	Emitted Color	Lens Color
264-10SURD/S530-A3	AlGaInP	Hyper Red	Red Diffused

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BG0308053,R0302557

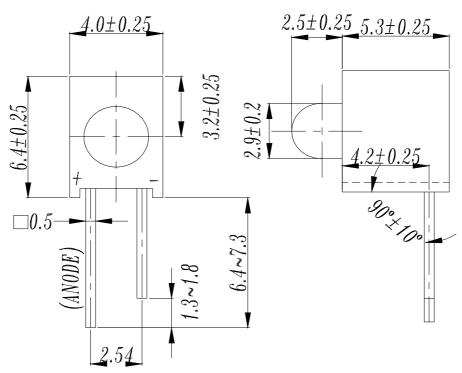


## **Technical Data Sheet**

## 3.0mm Round Type LED Lamps

## A214B/SUR/S530-A3

## **Package Dimensions**



**Notes:** 1.All dimensions are in millimeters, tolerance is 0.25mm except being specified 2.Lead spacing is measured where the lead emerge from the package

## 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	$260 \pm 5$	$^{\circ}\!\mathbb{C}$
Electrostatic Discharge	ESD	2000	V
Power Dissipation	Pd	60	mW
Peak Forward Current	IF(Peak)	160	mA
Reverse Voltage	Vr	5	V

Note: \*1:IFP Conditions --Pulse Width  $\leq$  1msec and Duty  $\leq$  1/10.

\*2:Soldering time  $\leq$  5 seconds.

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Technical Data Sheet
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## A214B/SUR/S530-A3

## Electro-Optical Characteristics (Ta=25 $^{\circ}$ C)

Parameter	Symbol	Condition	Min.	Тур.	Max.	Unit
Forward Voltage	VF	IF= 20 mA	/	2.0	2.4	V
Reverse Current	Ir	$V_{R}=5$ V	/	/	10	$\mu$ A
Luminous Intensity	Iv	IF= 20 mA	63	120	/	mcd
Viewing Angle	2 \theta 1/2	IF= 20 mA	/	60	/	deg
Peak Wavelength	λp	IF= 20 mA	/	632	/	nm
Dominant Wavelength	λd	IF= 20 mA		624		nm
Spectrum Radiation Bandwidth	Δλ	IF= 20 mA	/	20	/	nm

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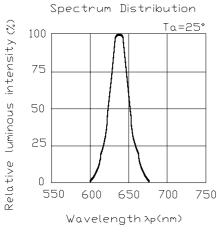


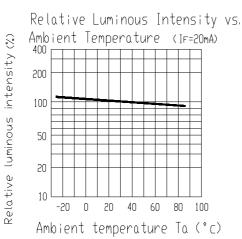
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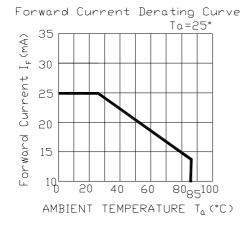
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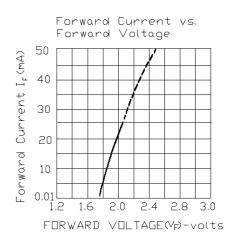
■ Typical Electro-Optical Characteristic Curves:

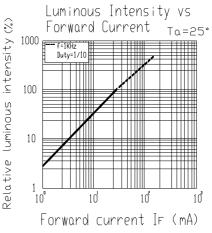


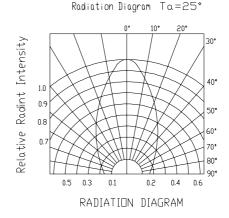












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## Technical Data Sheet

## 3.0mm Round Type LED Lamps

### A214B/G

## 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: $260^{\circ}\text{C} \pm 5^{\circ}\text{C}$	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	$H: +100^{\circ}\mathbb{C}$ 5min $\int$ 10 sec $L: -10^{\circ}\mathbb{C}$ 5min	300 CYCLES	76 PCS	Iv≦Ivt*0.5	0/1
4	High Temperature Storage	TEMP : 100°C	1000 HRS	76 PCS	or Vf≧U or	0/1
5	Low Temperature Storage	TEMP : -40°C	1000 HRS	76 PCS	Vf≦L	0/1
6	DC Operating Life	TEMP : 25°C If = 20mA	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 Limit

L: Lower Specification Limit

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# Technical Data Sheet 3.0mm Round Type LED Lamps

#### A214B/SUR/S530-A3

#### Packing Quantity Specification

- 1. 500PCS/1Bag , 4Bags/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 with 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.
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