

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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#### 313-2SDRD/S530-A3

### 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
313-2SDRD/S530-A3	AlGaInP	Super Deep-Red	Red Diffused

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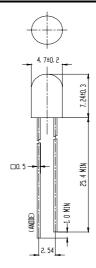
Device Number: CDLE-031-148 Prepared date: 2006/2/24 Prepared by: Xiuzhen Feng

BG0602125



313-2SDRD/S530-A3

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 $Ta = 25^{\circ}C$

Parameter	Symbol	Rating	Unit	
Forward Current	ĬF	25	mA	
Operating Temperature	Topr	-40 to +85	$^{\circ}\!\mathbb{C}$	
Storage Temperature	Tstg	-40 to +100	$^{\circ}\! \mathbb{C}$	
Electrostatic Discharge	ESD	2000	V	
Soldering Temperature	Tsol	$260 \pm 5$	$^{\circ}\!\mathbb{C}$	
Power Dissipation	Pd	60	mW	
Reverse Voltage	Vr	5	V	

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

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## 313-2SDRD/S530-A3

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

Parameter	Symbol	Condition	Min.	Тур.	Max.	Unit
Forward Voltage	VF	I <sub>F</sub> = 20 mA	/	2.0	2.4	V
Reverse Current	IR	$V_R$ = 5 $V$	/	/	10	μΑ
Luminous Intensity	Iv	I <sub>F</sub> = 20 mA	25	50	/	mcd
Viewing Angle	2 <i>θ</i> 1/2	I <sub>F</sub> = 20 mA	/	40	/	deg
Peak Wavelength	λp	I <sub>F</sub> = 20 mA	/	650	/	nm
Dominant Wavelength	λd	I <sub>F</sub> = 20 mA	/	639	/	nm
Spectrum Radiation Bandwidth	Δλ	I <sub>F</sub> = 20 mA	/	20	/	nm

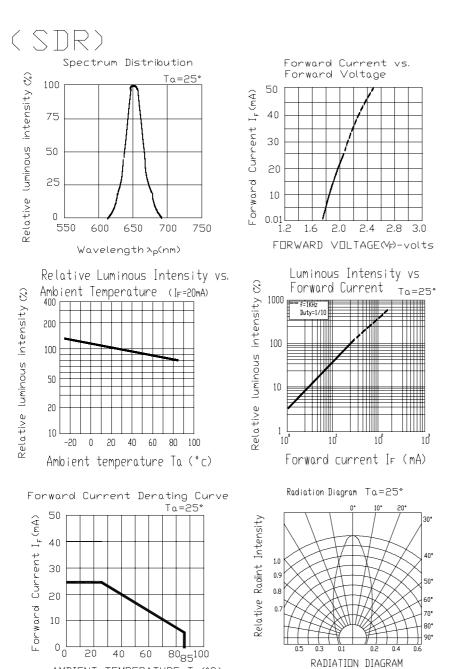
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## 313-2SDRD/S530-A3

## ■ Typical Electro-Optical Characteristic Curves:



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AMBIENT TEMPERATURE To (°C)



## 313-2SDRD/S530-A3

## 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		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		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°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 LimitL: Lower Specification Limit

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## Technical Data Sheet

## 4.7mm Round Type LED Lamps

## 313-2SDRD/S530-A3

Packing Quantity Specification

- 1. 1000PCS/1Bag , 4Bags/1Box
- 2. 10Boxes/1Carton

Label Form Specification

EVERLIGHT

CPN: P/N:

313-2SDRD/S530-A3

QTY:

LOT NO: EL

CAT: HUE: REF:



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 corporation

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