# imall

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!



# Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# Technical Data Sheet 5.0mm Round Type LED Lamps

#### 313-2SYGT/S530-E2

#### Features :

- Choice of various viewing angles
- Available on tape and reel.
- Reliable and robust
- Pb free
- $\bullet$  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

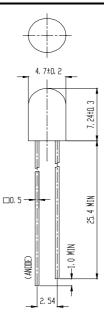
PART NO.	Material	Emitted Color	Lens Color
313-2SYGT/S530-E2	AlGaInP	Brillant Yellow Green	Green Trans

EVERLIGHT ELECT	RONICS CO.,LTD.	http://www.everlight.com	Rev.: 2	Page: 1 of 6
Device Number:	CDLE-031-107	Prepared date: 2006/12/10	Prepared by:	HongXia Zheng

## Technical Data Sheet 5.0mm Round Type LED Lamps

#### Package Dimensions

#### 313-2SYGT/S530-E2



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  $\pm 0.25$  mm.

#### Absolute Maximum Ratings at $Ta = 25^{\circ}C$

Parameter	Symbol	Rating	Unit	
Forward Current	IF	25	mA	
Operating Temperature	Topr	-40 to +85	°C	
Storage Temperature	Tstg	-40 to +100	°C	
Electrostatic Discharge	ESD	2000	V	
Power Dissipation	Pd	60	mW	
Reverse Voltage	Vr	5	V	

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

EVERLIGHT ELECTRONICS CO.,LTD. Device Number : CDLE-031-107 http://www.everlight.com Prepared date: 2006/12/10 Rev.:

2 Prepared by: Page: 2 of 6 HongXia Zheng

# Technical Data Sheet 5.0mm Round Type LED Lamps

#### 313-2SYGT/S530-E2

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 <sub>R</sub> = 5 V	/	/	10	μA
Luminous Intensity	Iv	$I_F$ = 20 mA	250.0	500.0	/	mcd
Viewing Angle	2 <i>0</i> 1/2	$I_F$ = 20 mA	/	20	/	deg
Peak Wavelength	λp	$I_F$ = 20 mA	/	575	/	nm
Dominant Wavelength	λd	I <sub>F</sub> = 20 mA	/	573	/	nm
Spectrum Radiation Bandwidth	$ riangle \lambda$	I <sub>F</sub> = 20 mA	/	20	/	nm

EVERLIGHT ELECTRONICS CO.,LTD. Device Number: CDLE-031-107 http://www.everlight.com Prepared date: 200 Rev.: 2 Prepared by: HongXia Z

Page: 3 of 6

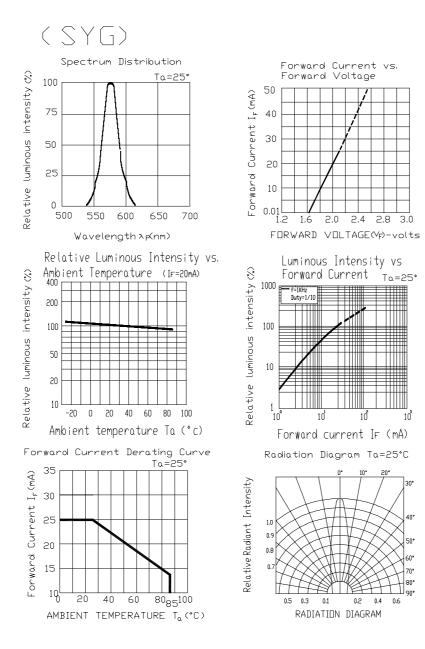
2006/12/10 Pr

Prepared by: HongXia Zheng

Technical Data Sheet 5.0mm Round Type LED Lamps

## 313-2SYGT/S530-E2

Typical Electro-Optical Characteristic Curves:



EVERLIGHT ELECTRONICS CO., LTD. CDLE-031-107 http://www.everlight.com Prepared date: 2006/12/10

Rev.: 2 Prepared by:

Page: 4 of 6 HongXia Zheng

Device Number:

# Technical Data Sheet 5.0mm Round Type LED Lamps

# 313-2SYGT/S530-E2

# 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	Iv≦Ivt*0.5 or Vf≧U or Vf≦L		0/1
2	Temperature Cycle	H:+100℃ 15min ∫ 5 min L:-40℃ 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	

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

 $\operatorname{Iv}\,$  : The test value of the chip that has completed the reliablility test

U: Upper Specification Limit

L: Lower Specification Limit

EVERLIGHT ELECTRONICS CO.,L Device Number : CDLE-031-107 P

http://www.everlight.com Prepared date: 2006/12/10 Rev.: 2 Prepared by:

Page: 5 of 6 HongXia Zheng

## Technical Data Sheet 5.0mm Round Type LED Lamps

## 313-2SYGT/S530-E2

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: 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

Please don' t reproduce or cause anyone to reproduce them without EVERLIGHT' sconsent.



EVERLIGHT ELECTRONICS CO.,LTD.

Device Number: CDLE-031-107

http://www.everlight.com Prepared date: 2006/12/10 Rev.: 2 Prepared by:

Page: 6 of 6 HongXia Zheng