



EVERLIGHT ELECTRONICS CO.,LTD.

# DATA SHEET

PART NO. : A253B/SUR/S530-A3

DATE : 2004/6/8

DEPARTMENT : CHR&D1

REVISION : 1

<b>RECEIVED</b>			
<input checked="" type="checkbox"/> MASS PRODUCTION			
<input type="checkbox"/> PRELIMINARY			
<input type="checkbox"/> CUSTOMER DESIGN			
DEVICE NUMBER : CDAE-025-033			
PAGE : 6			
CUSTOMER	DESIGNER	CHECKER	APPROVER
	游厚香		

REV.	DESCRIPTION	RELEASE DATE

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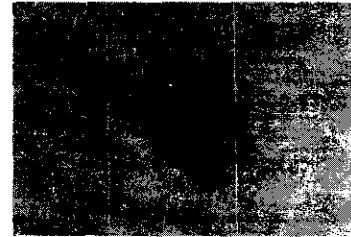
Technical Data Sheet

5.0mm Round Type LED Lamps

A253B/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



■ 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.

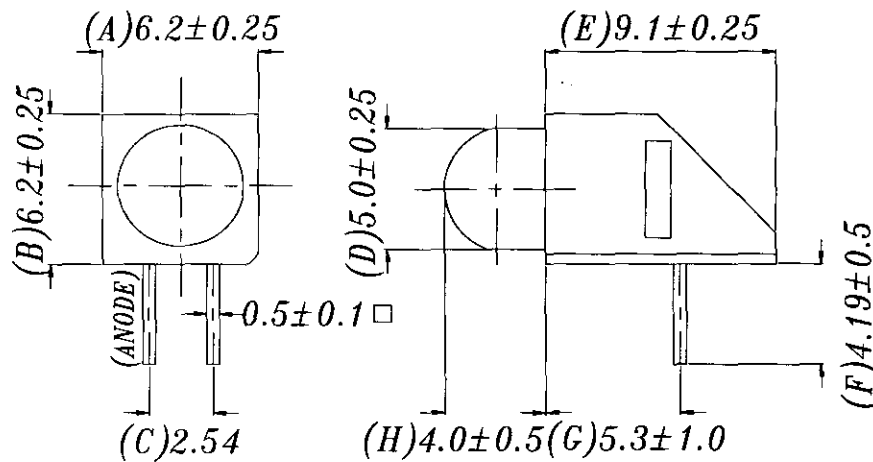
PART NO.	Chip		Lens Color
	Material	Emitted Color	
333-2SURD/S530-A3	AlGaInP	Hyper Red	Red Diffused

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**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°C**

Parameter	Symbol	Rating	Unit
Forward Current	IF	25	mA
Operating Temperature	Topr	-40 to +85	°C
Storage Temperature	Tstg	-40 to +100	°C
Soldering Temperature	Tsol	260 ± 5	°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 ≤ 1msec and Duty ≤ 1/10.

\*2:Soldering time ≤ 5 seconds.



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

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 20 mA	/	2.0	2.4	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> = 5 V	/	/	10	μA
Luminous Intensity	I <sub>v</sub>	I <sub>F</sub> = 20 mA	100	200	/	md
Viewing Angle	2θ 1/2	I <sub>F</sub> = 20 mA	/	30	/	deg
Peak Wavelength	λ <sub>p</sub>	I <sub>F</sub> = 20 mA	/	632	/	nm
Dominant Wavelength	λ <sub>d</sub>	I <sub>F</sub> = 20 mA	/	624	/	nm
Spectrum Radiation Bandwidth	Δλ	I <sub>F</sub> = 20 mA	/	20	/	nm



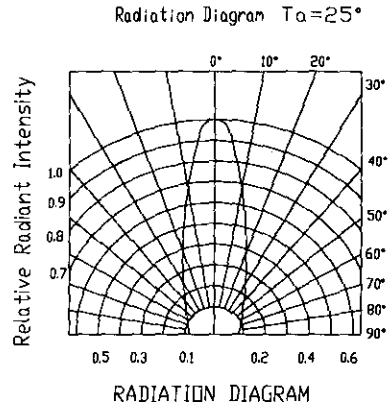
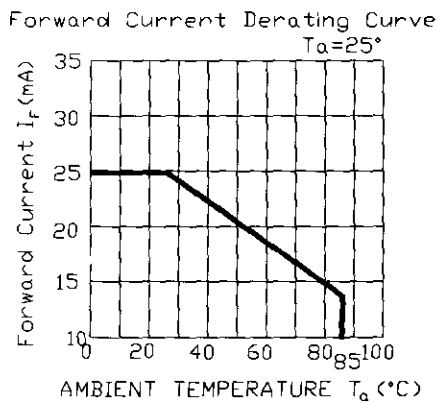
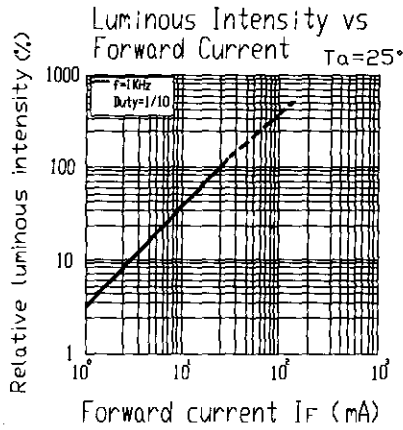
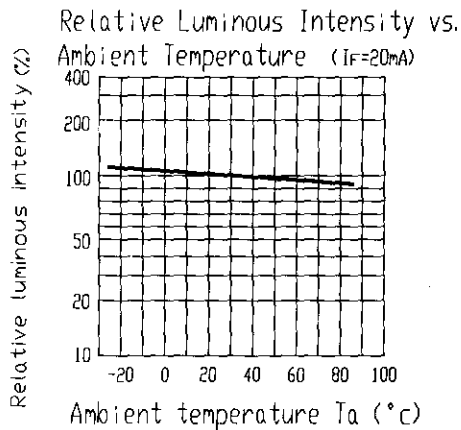
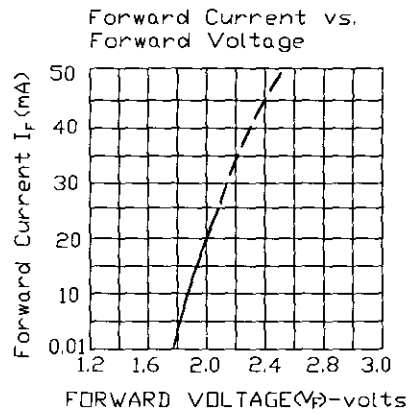
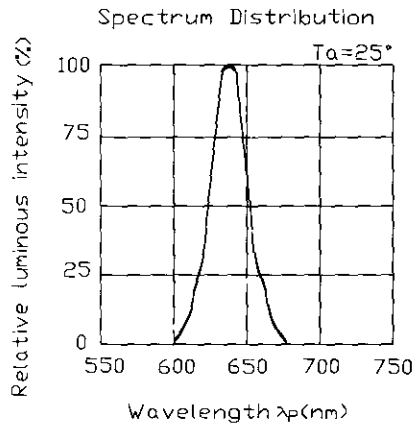
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Typical Electro-Optical Characteristic Curves:

(SUR)





Technical Data Sheet

5.0mm Round Type LED Lamps

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■ Reliability test items and conditions:

NO	Item	Test Conditions	Test Hours/Cycle	Sample Size	Ac/Re
1	Solder Heat	TEMP : 260°C ± 5 °C	10 SEC	76 PCS	0/1
2	Temperature Cycle	H : +100°C 15min § 5 min L : -40°C 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

