

DATA SHEET

PART NO.	<u>:</u>	583SURD/S530-A3	3			
DATE	<u>:</u>	2002/12/12				
DEPARTMENT : CHR&D1						
REVISION	:	1				
	REC	CEIVED				
MASS PRO	ODUCTION					
☐ PRELIMIN	NARY					
☐ CUSTOM!	ER DESIGN					
DEVICE NUM	BER:	CDLE-058-017				
PAGE:	4					
CUSTOMER	DESIGNER	CHECKER	APPROVER			
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REV.	DESCRIPTION	RELEASE DATE

Office: 7C Building, Lian Hua Port Industrial District, Lian Hua Shan

Bonded Pricessing Zone Pan Yu, Guang Zhou, China

TEL.: (020)84860913,84860914

FAX: (020)84860600

http://www.everlight.com



Device Number: CDLI

CDLE-058-017 R

REV.:

1

5.0*5.0mm Square Type LED Lamps

PART NO.: 583SURD/S530-A3

Features:

- Choice of various viewing angles
- Available on tape and reel.
- Reliable and robust

Descriptions :

- The series is specially designed for applications requiring higher brightness
- The led lamps are available with different colors, intensities,

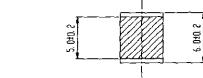
Applications :

- TV set
- Monitor
- Telephone
- Computer

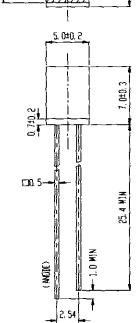
ECN:

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Package Dimensions:



Notes:

- 1. All dimensions are in millimeters.
- 2. An epoxy meniscus may extend about 1.5mm(0.059") down to the lead.
- 3. Tolerances unless Dimension ±0.25mm.

PART NO.		Chip	Lens Color	
	Material	Emitted Color	Lens Color	
583SURD/S530-A3	AlGaInP	Hyper Red	Red Diffused	

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Device N	umber:	CDLE-058-017	REV.:	1

5.0*5.0mm Square Type LED Lamps

PART NO.: 583SURD/S530-A3 ECN: Page: 2/4

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

Parameter	Symbol	Rating	Unit
Forward Current	IF	25	mA
Operating Temperature	Topr	-40 to +85	${\mathbb C}$
Storage Temperature	Tstg	-40 to +100	\mathbb{C}
Soldering Temperature	Tsol	260 ± 5	${\mathbb C}$
Electrostatic Discharge	ESD	2000	V
Power Dissipation	Pd	60	mW
Peak Forward Current(Duty 1/10 @ 1KHz)	IF(Peak)	160	mA
Reverse Voltage	Vr	5	V

■ Electronic Optical Characteristics:

Parameter	Symbol	Min.	Тур.	Мах.	Unit	Condition
Luminous Intensity	Ιv	12.5	20.0	/	mcd	IF≈ 20 mA
Viewing Angle	2 <i>θ</i> 1/2	/	130	/	deg	IF= 20 mA
Peak Wavelength	λp	/	632	/	nm	IF= 20 mA
Dominant Wavelength	λd	/	624	/	nm	IF≈ 20 mA
Spectrum Radiation Bandwidth	Δλ	1	20	/	nm	IF= 20 mA
Forward Voltage	VF	/	2.0	2.4	V	IF= 20 mA
Reverse Current	ĪR	/	/	10	μΑ	Vr= 5 V



Device Number:

CDLE-058-017 REV.: 1

5.0*5.0mm Square Type LED Lamps

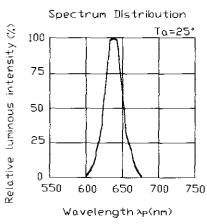
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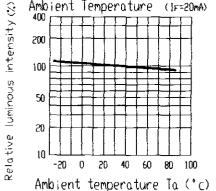
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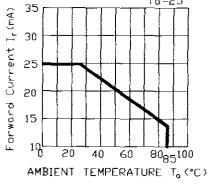
Typical Electro-Optical Characteristic Curves:

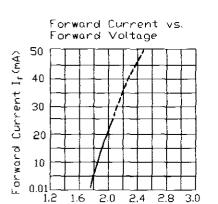


Relative Luminous Intensity vs. Ambient Temperature (IF=20mA)

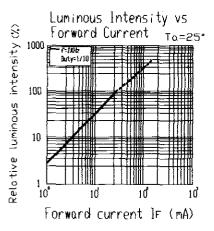


Forward Current Denating Curve Tα=25°

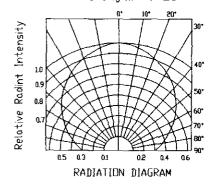




FORWARD VOLTAGE (4)-volts



Radiation Diagram Ta=25°



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5.0*5.0mm Square Type LED Lamps			
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■ Reliability test items and conditions:

NO	Item	Test Conditions	Test Hours/Cycle		Ac/Re
1	Solder Heat	TEMP: 260° C ± 5 $^{\circ}$ C	5 SEC	76 PCS	0/1
2	Temperature Cycle	H : +85°C 30min ∫ 5 min L : -55°C 30min	50 CYCLES	76 PCS	0/1
3	Thermal Shock	H: +100°C 5min ∫ 10 sec L: -10°C 5min	50 CYCLES	76 PCS	0/1
4	High Temperature Storage	TEMP: 100°C	1000 HRS	76 PCS	0/1
5	Low Temperature Storage	TEMP : -55°C	1000 HRS	76 PCS	0/1
6	DC Operating Life	TEMP : 25℃ If = 20mA	1000 HRS	76 PCS	0/1
7	High Temperature / High Humidity	85℃ / 85% RH	1000 HRS	76 PCS	0/1

Mouser Electronics

Authorized Distributor

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Everlight:

583SURD/S530-A3