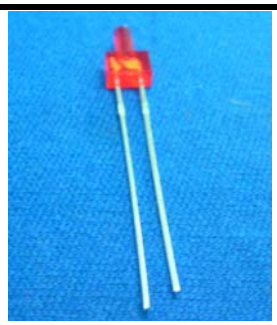
Technical Data Sheet
2.0mm Tower Type LED Lamps

103SURD/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
103SURD/S530-A3	AlGaInP	Hyper Red	Red Diffused

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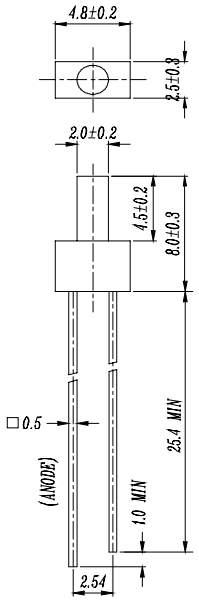
Package Dimensions



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℃

Parameter	Symbol	Rating	Unit
Forward Current	I_F	25	mA
Operating Temperature	Topr	-40 to +85	℃
Storage Temperature	Tstg	-40 to +100	℃
Soldering Temperature	Tsol	260 ± 5	℃
Electrostatic Discharge	ESD	2000	V
Power Dissipation	Pd	60	mW
Reverse Voltage	V_R	5	V

Note: *1:Soldering time ≦ 5 seconds.

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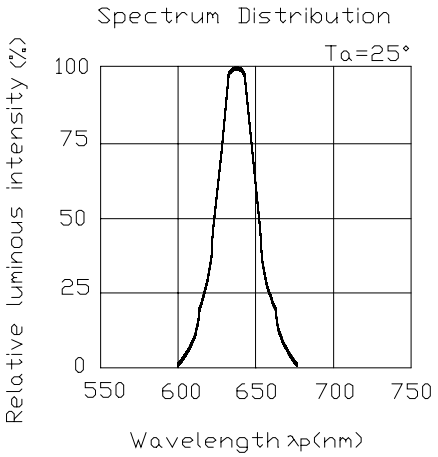
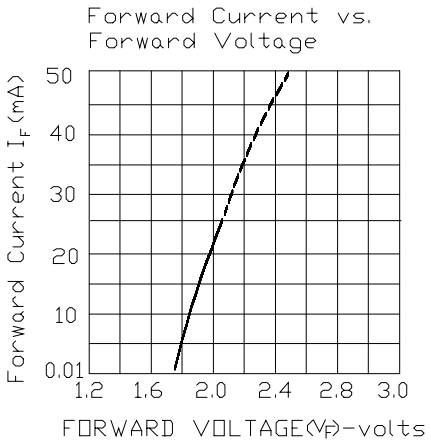
Electro-Optical Characteristics (Ta=25℃)

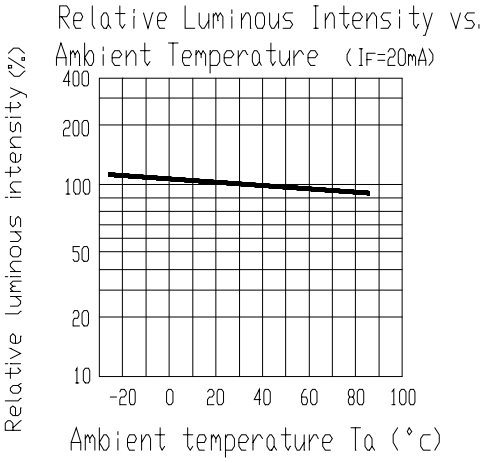
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	VF	I_F= 20 mA	／	2.0	2.4	V
Reverse Current	IR	V_R= 5 V	／	／	10	μA
Luminous Intensity	Iv	I_F= 20 mA	25	40	／	mcd
Viewing Angle	2θ1/2	I_F= 20 mA	／	130	／	deg
Peak Wavelength	λp	I_F= 20 mA	／	632	／	nm
Dominant Wavelength	λd	I_F= 20 mA	／	624	／	nm
Spectrum Radiation Bandwidth	△λ	I_F= 20 mA	／	15	／	nm

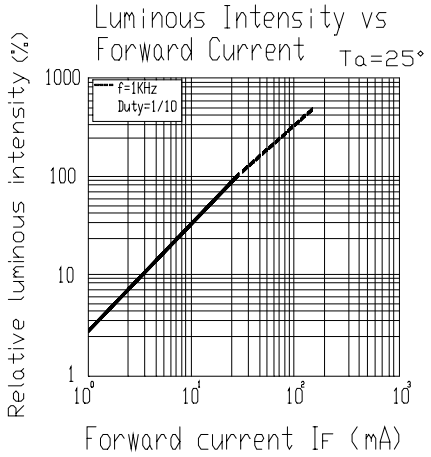
■ Typical Electro-Optical Characteristic Curves:

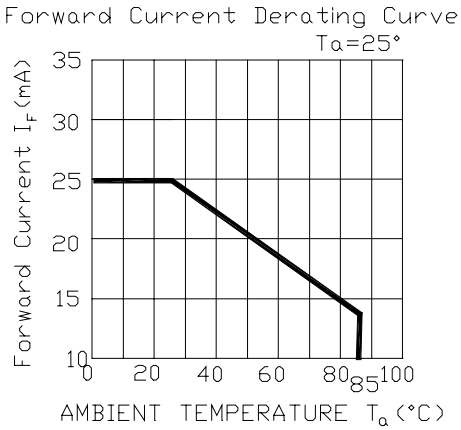
(SUR)

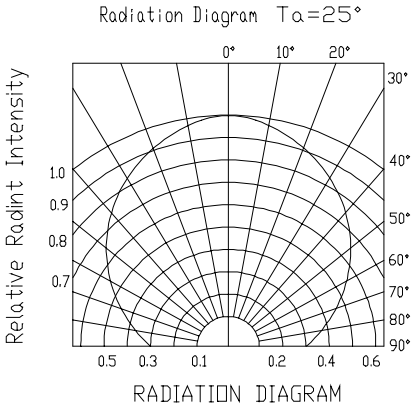












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■ Reliability test items and conditions:

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℃ ± 5 ℃	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℃ 5min ∫ 10 sec L : -10℃ 5min	300 CYCLES	76 PCS		0/1
4	High Temperature Storage	TEMP : 100℃	1000 HRS	76 PCS		0/1
5	Low Temperature Storage	TEMP : -40℃	1000 HRS	76 PCS		0/1
6	DC Operating Life	TEMP : 25℃ I_F = 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

Technical Data Sheet

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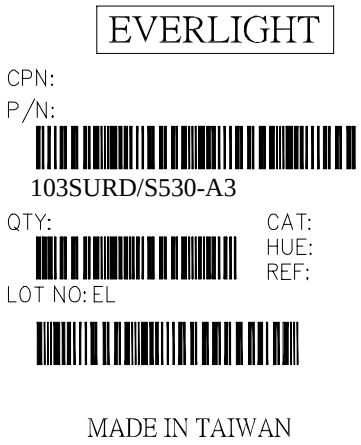
Packing Quantity Specification

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: Peak Wavelength

REF: Reference

LOT No: Lot Number

MADE IN TAIWAN: Production Place

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.

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