



Technical Data Sheet

5.0mm Round Type LED For Tapping

333-2SURT/S530-A3/TR1-4

Features :

- Long life feature.
- Low power consumption.
- High emitting efficiency.
- Most radial lead plastic LED lamp available packed in ape and reel.
- Reel package simplifies handling and teating.
- Pb free



Descriptions :

- 1.The 333 lamps are made with AlGaInp diodes, which emit Hyper Red
- 2.Automatically insertable with radial lead insertion equipmine.

Applications :

- Audio equipment
- Monitor
- Sign board
- Computer peripheral
- Air condition
- Home appliance
- Satellite receiver
- Burglar alarm
- Stop light

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

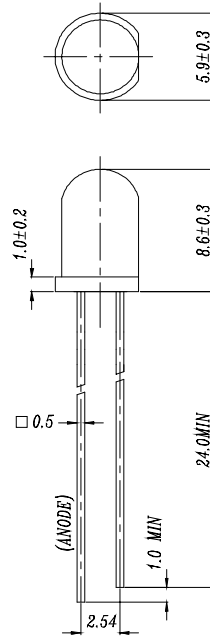


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Package Dimensions



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
- 3.Protuded resin under flange is 1.5 mm(0.059" ) Max LED.

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
Reverse Voltage	VR	5	V

Note: \*1:Soldering time ≤ 5 seconds.

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**333-2SURT/S530-A3/TR1-4****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	/	mcd
Viewing Angle	2θ 1/2	I <sub>F</sub> = 20 mA	/	15	/	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

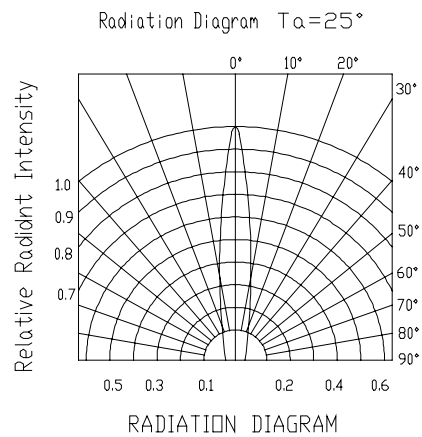
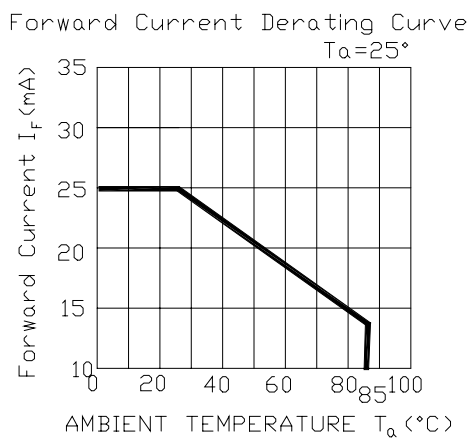
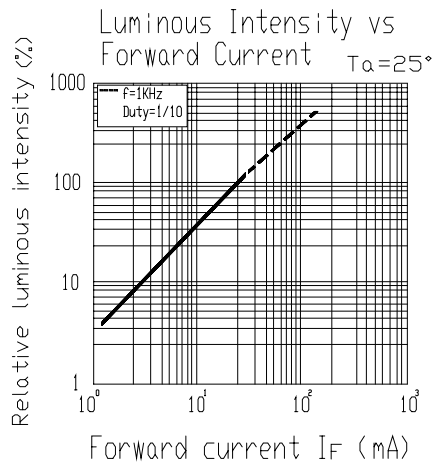
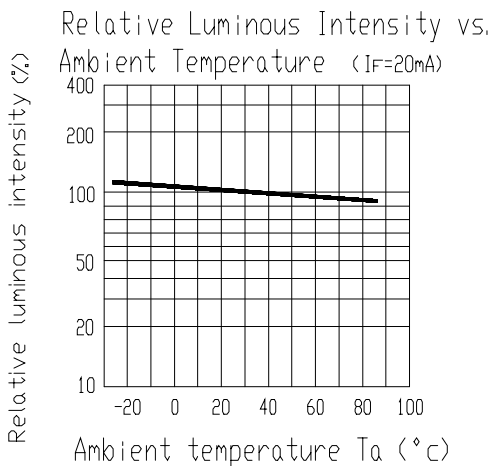
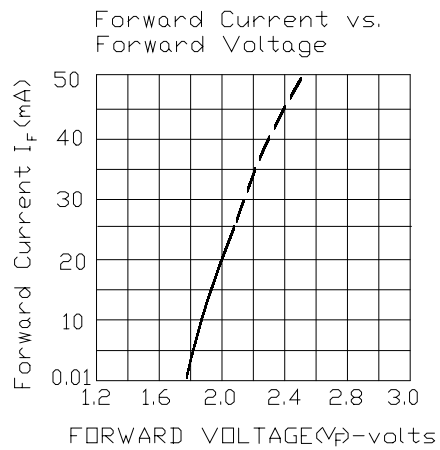
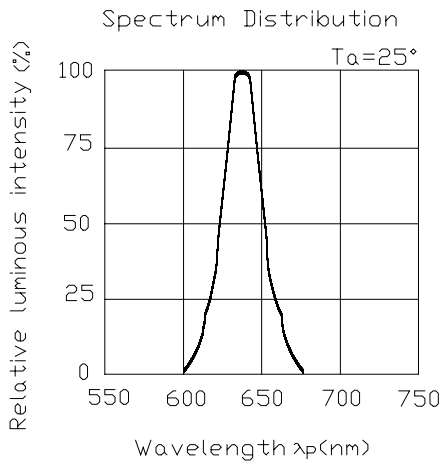
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**333-2SURT/S530-A3/TR1-4**

■ Typical Electro-Optical Characteristic Curves:

( SUR )



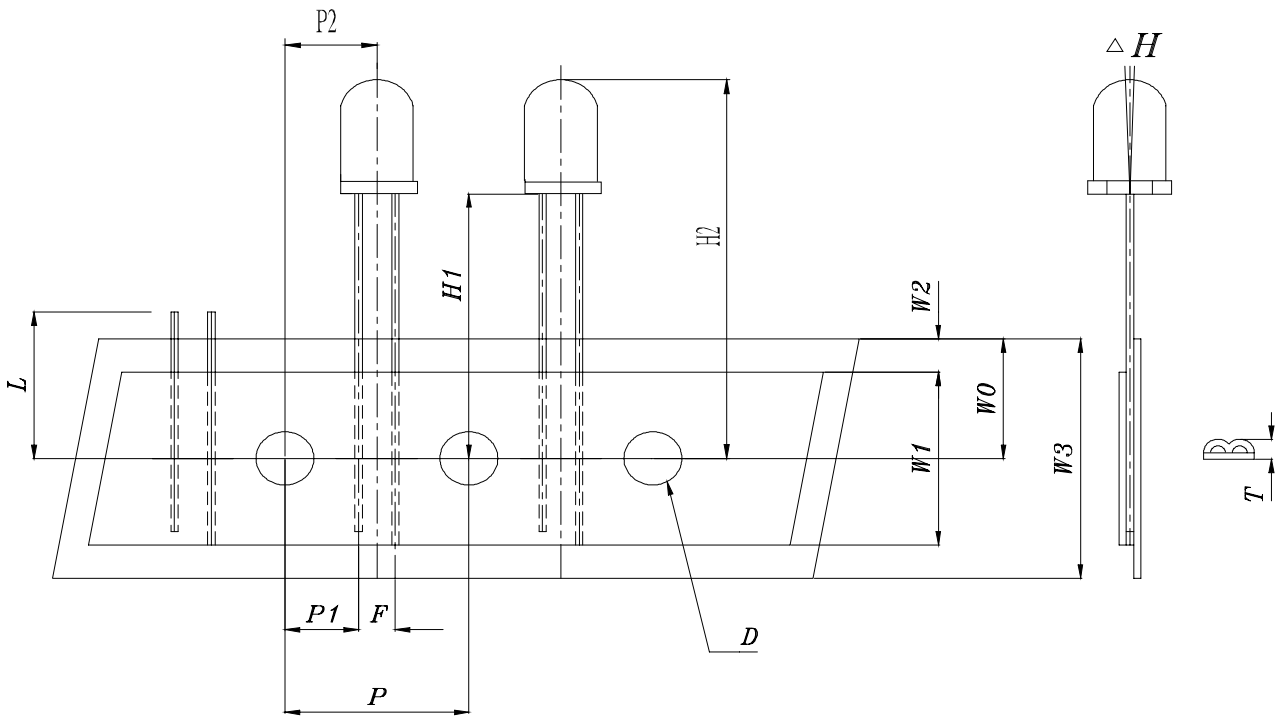


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5.0mm Round Type LED For Tapping

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Taping 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

**Technical Data Sheet**
**5.0mm Round Type LED For Tapping**
**333-2SURT/S530-A3/TR1-4**
**Dimensions symbol linformations**
**(Ta=25°C)**

Symbol Items	Sybmol	Specifications		
		Avg.		Tolerance (mm)
		mm	Inch	
Tape Feed Hole Diameter	D	4.0	0.157	±0.2
Component Lead Pitch	F	2.54	0.100	+0.8/-0.2
Front-to-Read Deflection	△H	0°	0	±5°
Feed Hole to Button of Component	H1	22.40	0.882	±1.0
Feed Hole to Overall Component Height	H2	31.00	1.220	±1.0
Lead Length after Component Removal	L	11.00	0.433	MAX
Feed Hole Pitch	P	12.70	0.500	±0.3
Lead Location	P1	5.08	0.200	±0.7
Center of Component Location	P2	6.35	0.250	±1.2
Overall Taped Package Thickness	T	1.42	0.056	MAX
Feed Hole Location	W0	9.00	0.354	±0.5
Adhesive Tape Width	W1	13.00	0.512	±0.5
Adhesive Tape Position	W2	2.00	0.079	MAX
Tape Width	W3	18.00	0.709	±0.75
Package	Quantity/Reel		Order Increments	
T-1	1000		1000	
Package	Quantity/Ammo		Order Increments	
T-1	1500		1500	

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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°C ± 5 °C	10 SEC	76 PCS	$I_v \leq I_{vt} * 0.5$ or $V_f \geq U$ or $V_f \leq L$	0/1
2	Temperature Cycle	H : +100°C 15min $\int$ 5 min L : -40°C 15min	300 CYCLES	76 PCS		0/1
3	Thermal Shock	H : +100°C 5min $\int$ 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 I <sub>F</sub> = 20mA	1000 HRS	76 PCS		0/1
7	High Temperature / High Humidity	85°C / 85% RH	1000 HRS	76 PCS		0/1

Note : I<sub>vt</sub> : To test I<sub>v</sub> value of the chip before the reliability test  
 I<sub>v</sub> : The test value of the chip that has completed the reliability test  
 U : Upper Specification Limit  
 L : Lower Specification Limit



# EVERLIGHT ELECTRONICS CO.,LTD.

## Technical Data Sheet

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#### Packing Quantity Specification

- 1.1000PCS/1Box
- 2. 10Boxes/1Carton

#### Label Form Specification



CPN:  
P/N:



333-2SURT/S530-A3/TR1-4

QTY:



CAT:  
HUE:  
REF:

LOT NO: EL



MADE IN TAIWAN

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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