

## DATASHEET

## **30-01SURC**

### Features

- . High Flux Output.
- . Designed for High Current Operation.
- . Low Thermal Resistance.
- . Low Profile.
- . Packaged in Tubes for Use with Automatic.
- . Insertion Equipment.
- . The product itself will remain within RoHS compliant version.
- . Compliance with EU REACH.
- . Compliance Halogen Free .(Br <900 ppm ,Cl <900 ppm , Br+Cl < 1500 ppm).

## **Descriptions**

This revolutionary package design allows the light designer to reduce the number of LEDs required and provide a more uniform and unique illuminated appearance than with other LED solutions. This is possible through the efficient optical package design and high-current capabilities.

The low profile package can be easily coupled with reflectors or lenses to efficiently distribute light and provide the desired light appearance.

## Applications

- . Automotive Exterior Lighting
- . Electronic Signs and Signals
- . Special Lighting application

### **Device Selection Guide**

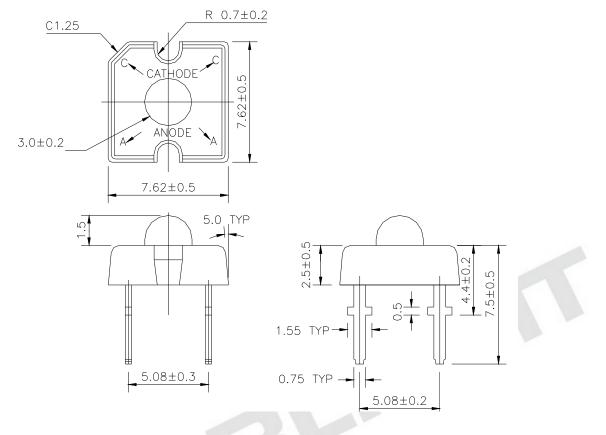
PART NO.	C		
	Material	<b>Emitted</b> Color	Lens Color
30-01SURC	AlGaInP	Brilliant Red	Water Clear

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## **Package Dimensions**



**Notes:** 1.All dimensions are in millimeters

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2.An epoxy meniscus may extend about 1.5mm(0.059") down the leads

3.Tolerances unless dimensions ±0.25mm



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## Absolute Maximum Ratings (Ta=25 )

Parameter	Symbol	Rating	Units
Continuous Forward Current	I <sub>F</sub>	70	mA
Reverse Voltage	V <sub>R</sub>	5	V
Operating Temperature	T <sub>opr</sub>	-40 ~ +85	
Storage Temperature	T <sub>stg</sub>	-40 ~ +100	
Soldering Temperature(T=5 sec)	T <sub>sol</sub>	$260 \pm 5$	
LED Junction Temperature	Tj	115	
Power Dissipation	P <sub>d</sub>	220	mW
Electrostatic Discharge	ESD	2000	V

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Parameter	Symbol	Min.	Тур.	Max.	Condition	Unit
Total Flux	V	1425	2000	3600	IF=70mA	mlm
Viewing Angle	2 1/2		80		IF=70mA	deg
Peak Wavelength	р		632		IF=20mA	nm
Dominant Wavelength	d	620	624	632	IF=20mA	nm
Spectrum Radiation Bandwidth			20		IF=20mA	nm
Forward Voltage	VF	1.9	2.4	2.7	IF=70mA	V
<b>Reverse Current</b>	IR			10	V <sub>R</sub> =5V	uA
Rank						
30-01SURC		(1)	(2)	(3)		

## Electro-Optical Characteristics (Ta=25 )

### Rank

(2)(1)

	(1) VF(V)		(2) d(nm)		(3) v(mlm)			
Bin	Min	Max	Bin	Min	Max	Bin	Min	Max
0	1.9	2.1	2	620	624	L	1425	1800
1	2.1	2.3	3	624	628	М	1800	2250
2	2.3	2.5	4	628	632	Ν	2250	2850
3	2.5	2.7				Р	2850	3600

\*Measurement Uncertainty of Forward Voltage : ±0.1V

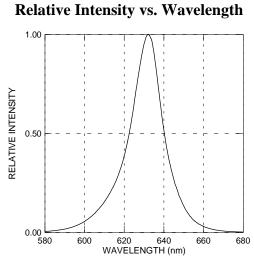
\*Measurement Uncertainty of Total Flux: ±15%

\*Measurement Uncertainty of Dominant Wavelength ±1.0nm

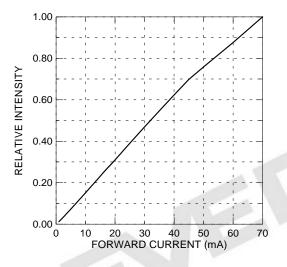
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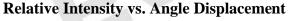


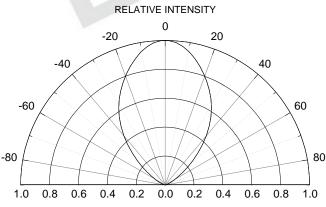
## **Typical Electro-Optical Characteristics Curves**



#### **Relative Intensity vs. Forward Current**

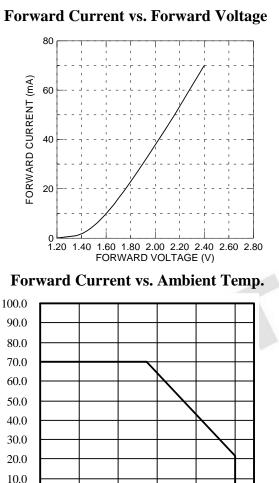


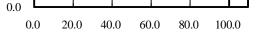




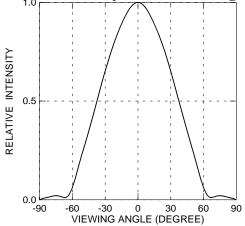
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Relative Intensity vs. Off Axis Angle



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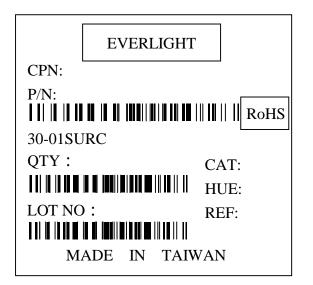
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## **Packing Quantity Specification**

80 pcs/1 tube, 36 tubes/1 small inside box, 9 small inside boxes/1 outside box

## **Label Form Specification**



**CPN:** Customer's Production Number P/N : Production Number **QTY:** Packing Quantity CAT: Ranks of Total Flux and Forward Voltage HUE: Ranks of Dominant Wavelength **REF:** Reference LOT No: Lot Number MADE IN TAIWAN: Production Place

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#### 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's consent.
- 4. Soldering Condition

Careful attention should be paid during soldering. When soldering, leave more then 3mm from solder joint to case, and soldering beyond the base of the tie bar is recommended.

Avoiding applying any stress to the lead frame while the LEDs are at high temperature particularly when soldering.

Hand	Soldering	DIP Soldering		
Temp. at tip of iron	400 Max. (30W Max.)	Preheat temp.	100 Max. (60 sec Max.)	
Soldering time	3 sec Max.	Bath temp.	265 Max.	
Distance	3mm Min.(From solder joint to case)	Bath time.	5 sec Max.	
		Distance	3mm Min.	

**Recommended soldering conditions** 

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