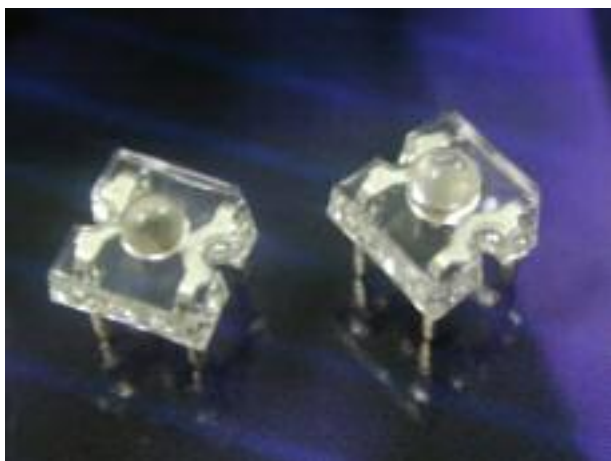


WP7677C2SURC/G



### Technical Data

#### Features:

- \*High Luminance output.
- \*Design for High Current Operation.
- \*Uniform Color.
- \*Low Power Consumption.
- \*Low Thermal Resistance.
- \*Low Profile.
- \*Packaged in tubes for use with automatic insertion equipment.
- \*RoHS Compliant.

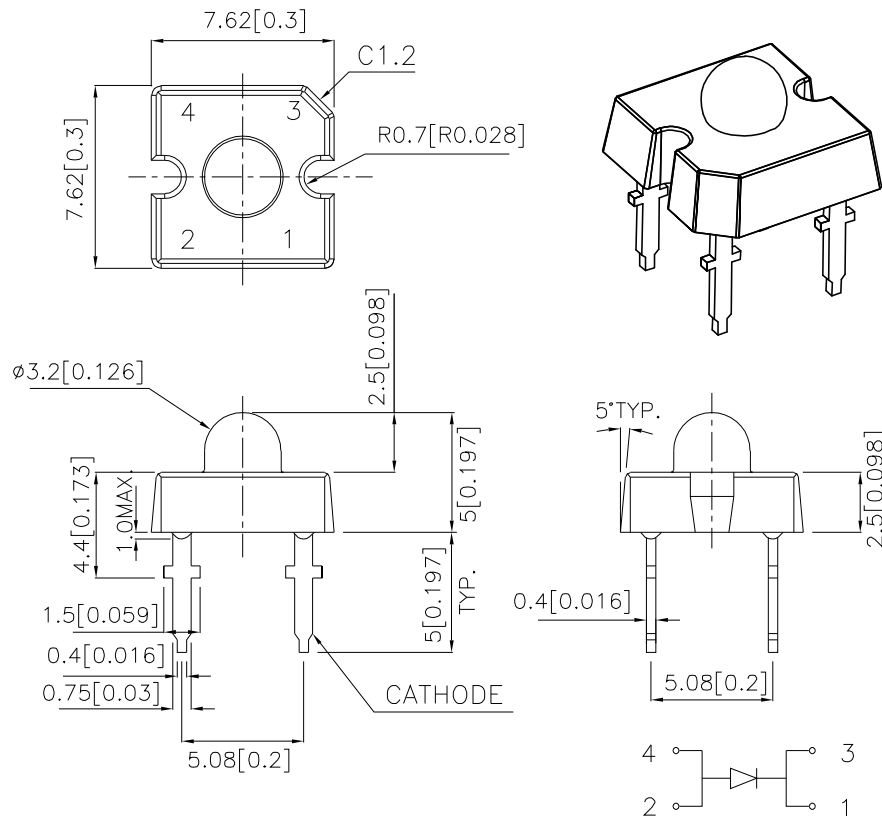
#### Benefits:

- \*Outstanding Material Efficiency.
- \*Electricity savings.
- \*Maintenance savings.
- \*Reliable and Rugged.

#### Typical Applications:

- \*Automotive Exterior Lighting.
- \*Electronic Signs and Signals.
- \*Specialty Lighting.

Outline Drawings



- Notes:
1. All dimensions are in millimeters (inches).
  2. Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.
  3. Lead spacing is measured where the leads emerge from the package.
  4. Specifications are subject to change without notice.

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

PARAMETER	SUR/G	UNITS
DC Forward Current	70	mA
Power dissipation	182	mW
Reverse Voltage	5	V
Operating Temperature	-40 To +85	$^{\circ}\text{C}$
Storage Temperature	-55 To +85	$^{\circ}\text{C}$
Lead Solder Temperature <sup>[1]</sup>	260 $^{\circ}\text{C}$ For 5 Seconds	

1. 1.5mm[0.06inch] below seating plane.

## Selection Guide

Part No.	LED COLOR	Iv(cd) <sup>[1]</sup> @ 70mA		Viewing Angle <sup>[2]</sup>
		Min.	Typ.	2θ1/2 Typ.
WP7677C2SURC/G	DH InGaAlP RED	4.7	8.0	30°

Notes:

- 1.Luminous intensity is measured with an integrating sphere after the device has stabilized.  
2.θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Optical Characteristics at TA=25°C  
If=70mA Rθj-a=200°C/W

DEVICE TYPE	PEAK WAVELENGTH λPEAK (nm) TYP.	DOMINANT <sup>[1]</sup> WAVELENGTH λDOM (nm) TYP.	SPECTRAL LINE WAVELENGTH Δλ1/2(nm) TYP.
SUR/G	640	630	22

NOTE:

- 1.The dominant wavelength is derived from the CIE Chromaticity Diagram and represents the perceived color of the device.

Electrical Characteristics at TA=25°C

DEVICE  TYPE	FORWARD VOLTAGE V <sub>F</sub> (VOLTS) @ I <sub>F</sub> =70mA			REVERSE CURRENT I <sub>R</sub> (uA) @ V <sub>R</sub> =5V	CAPACITANCE C (pF) @ V <sub>F</sub> =0V F=1MHZ	THERMAL RESISTANCE Rθj-pin °C/W
	MIN.	TYP.	MAX.	MAX.	TYP.	TYP.
SUR/G	2.1	2.3	2.6	10	45	125

## Figures

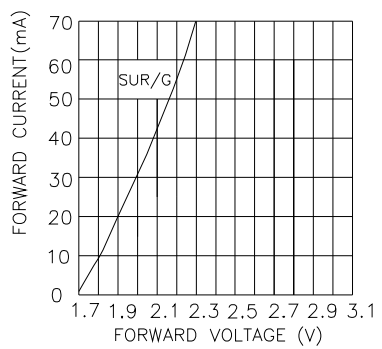
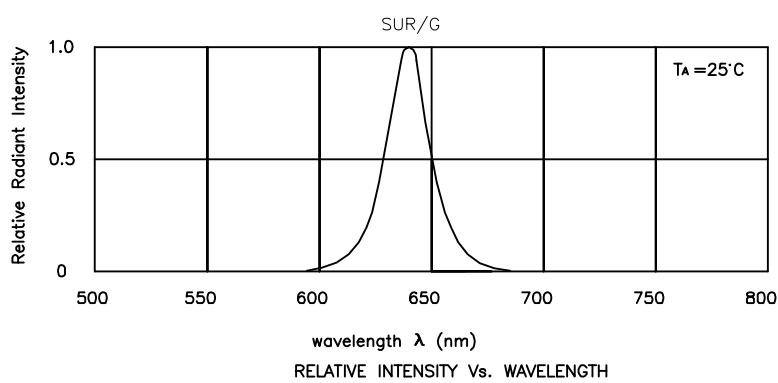


Figure2: FORWARD CURRENT Vs. FORWARD VOLTAGE

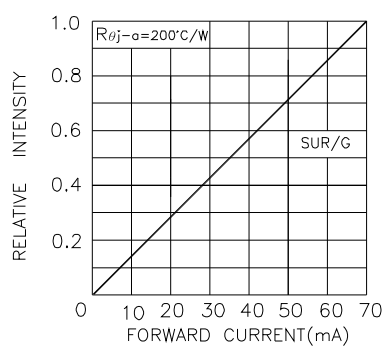


Figure3: RELATIVE INTENSITY Vs. FORWARD CURRENT

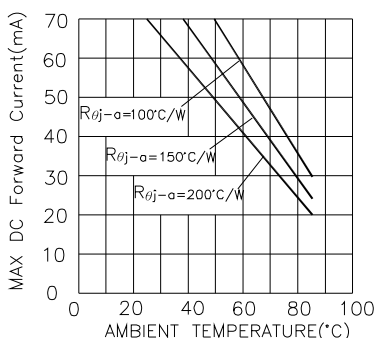


Figure4: SUR/G MAX DC FORWARD CURRENT Vs AMBIENT TEMPERATURE

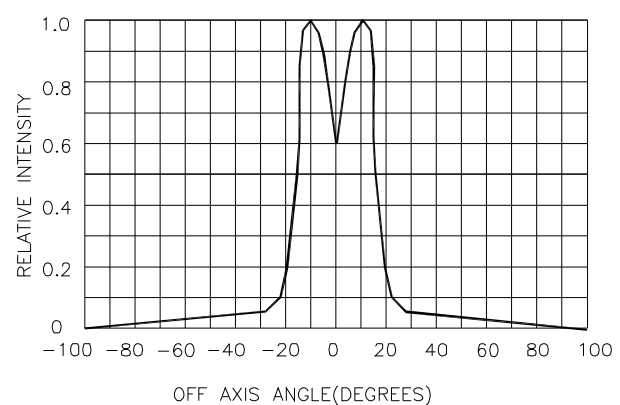
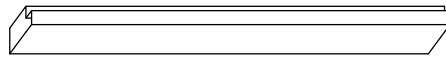
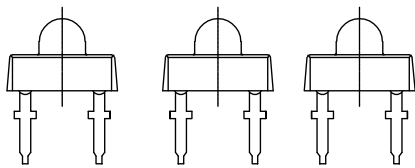


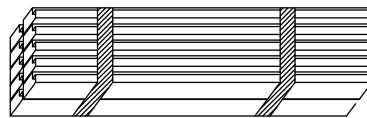
Figure5: RELATIVE INTENSITY VS OFF AXIS ANGLE

## PACKING & LABEL SPECIFICATIONS

WP7677C2SURC/G



75PCS / IC TUBE




750pcs / 10pcs IC TUBE



OUTSIDE LABEL

24K / 6# BOX

<b>Kingbright</b>	
Q.C.	
TYPE NO : WP7677C2xxx	
QUANTITY : 750 pcs	
S/N : XX	CODE: XXX
LOT NO : 	
MADE IN CHINA	
RoHS Compliant	

QC

XX XX. XXXX

PASSED

Date

### Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity/ luminous flux or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm
2. Luminous Intensity/ Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.