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.

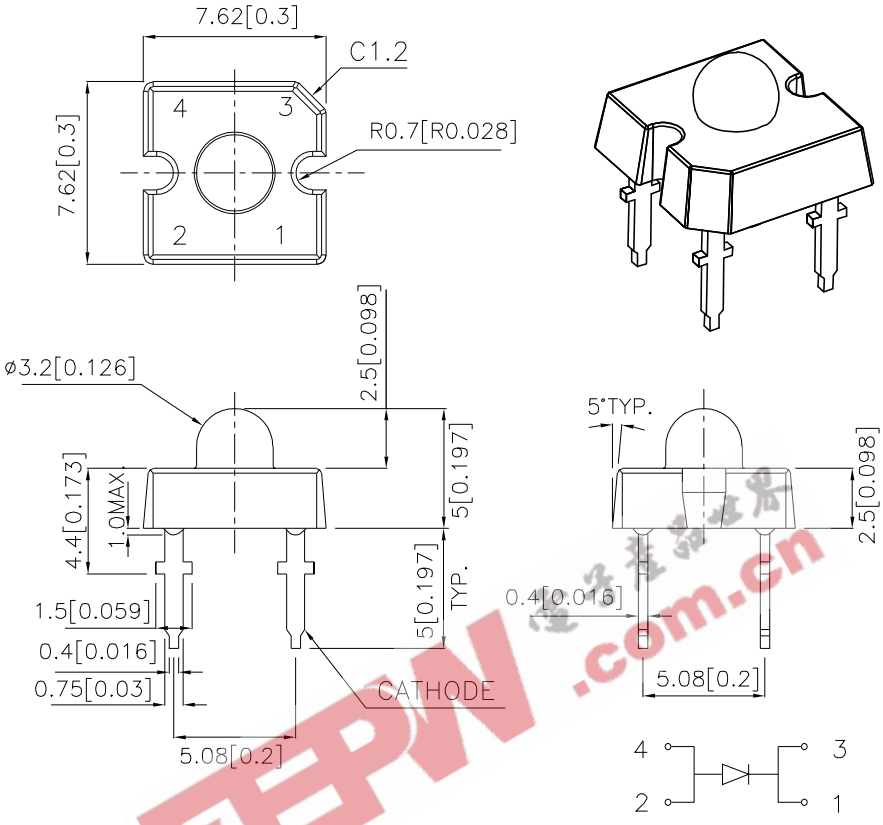
Typical Applications:

*Automotive Exterior Lighting.

*Electronic Signs and Signals.

*Specialty Lighting.

Outline Drawings



Notes:
1. All dimensions are in millimeters (inches).
2. Tolerance is ±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 TA=25°C

PARAMETER	SUR/G	UNITS
DC Forward Current	70	mA
Power dissipation	182	mW
Reverse Voltage	5	V
Operating Temperature	-40 To +85	˚C
Storage Temperature	-55 To +85	˚C
Lead Solder Temperature[1]	260°C For 5 Seconds	

1.1.5mm[0.06inch]below seating plane.

Kingbright

Selection Guide

Part No.	LED COLOR	Iv(cd)[1] @70mA Min.	Iv(cd)[1] @70mA Typ.	Viewing Angle[2] 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

I_F=70mA $R_{\theta j-a}$=200°C/W

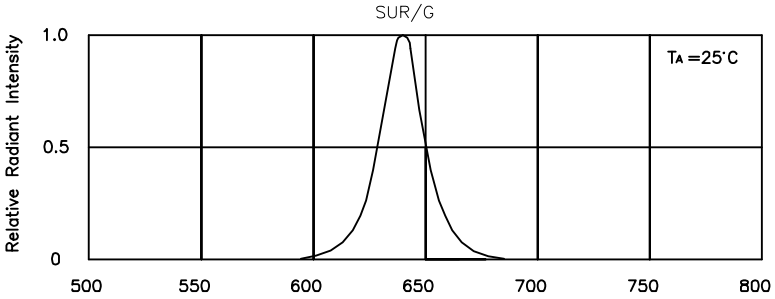
DEVICE TYPE	PEAK WAVELENGTH λPEAK (nm) TYP.	DOMINANT[1] WAVELENGTH λDOM (nm) TYP.	SPECTRAL LINE WAVELENGTH Δλ1/2(nm) TYP.
SUR/G	640	630	22

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_F(VOLTS) @ I_F=70mA MIN.	FORWARD VOLTAGE V_F(VOLTS) @ I_F=70mA TYP.	FORWARD VOLTAGE V_F(VOLTS) @ I_F=70mA MAX.	REVERSE CURRENT I_R (uA) @ V_R=5V MAX.	CAPACITANCE C (pF) @ V_F=0V F=1MHZ TYP.	THERMAL RESISTANCE Rθj-pin °C/W TYP.
SUR/G	2.1	2.3	2.6	10	45	125

Figures



RELATIVE INTENSITY Vs. WAVELENGTH

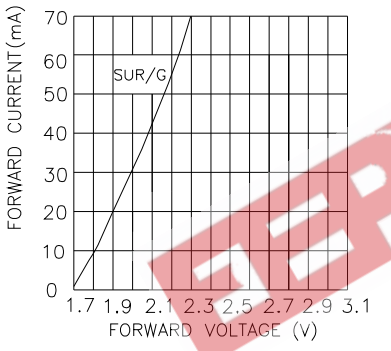


Figure2: FORWARD CURRENT Vs. FORWARD VOLTAGE

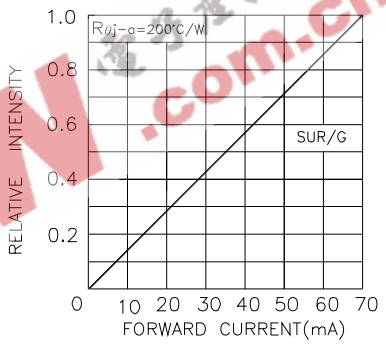


Figure3: RELATIVE INTENSITY Vs. FORWARD CURRENT

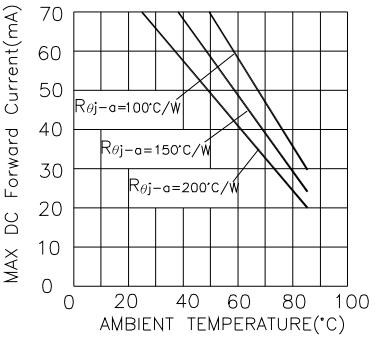


Figure4: SUR/G
MAX DC FORWARD CURRENT Vs AMBIENT TEMPERATURE

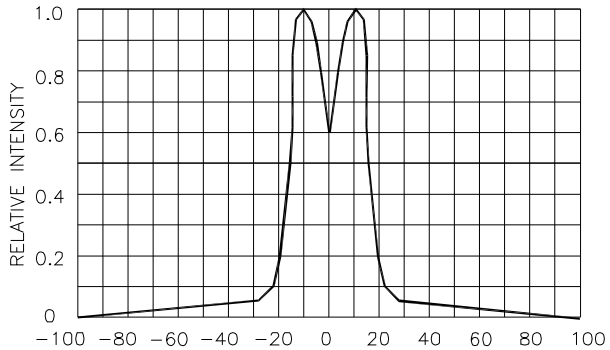
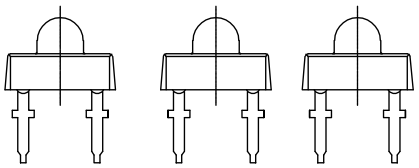
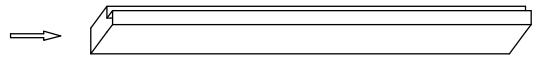


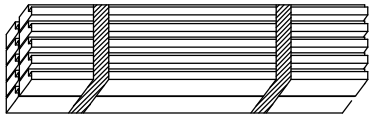
Figure5: RELATIVE INTENSITY VS OFF AXIS ANGLE

PACKING & LABEL SPECIFICATIONS **WP7677C2SURC/G**





75PCS / IC TUBE



750pcs / 10pcs IC TUBE

24K / 6# BOX

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.