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.

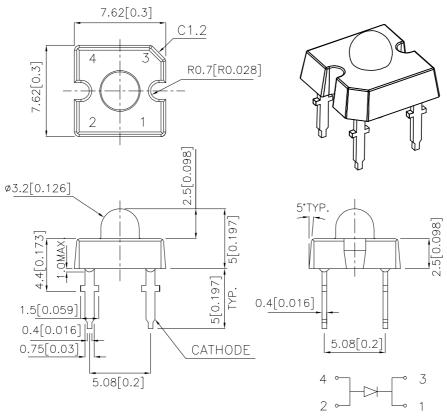
Typical Applications:

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

SPEC NO: DSAF6114 APPROVED: J. Lu REV NO: V.1
CHECKED: Allen Liu

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Outline Drawings



- 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.

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Selection Guide

Part No.	LED COLOR		:d) ^[1] 0mA Typ.	Viewing Angle ^[2] 201/2 Typ.
WP7677C2SURC/G	DH InGaAIP RED	4.7	8.0	30°

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

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

NOTE:

Electrical Characteristics at TA=25°C

DEVICE TYPE	FORWARD VOLTAGE VF(VOLTS) @ IF=70mA		REVERSE CURRENT IR (uA) @ VR=5V	CAPACITANCE C (pF) @ V _F =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

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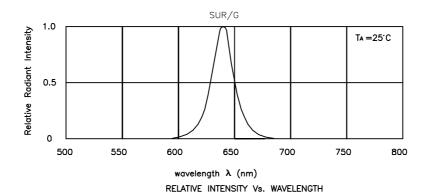
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^{1.}Luminous intensity is measured with an integrating sphere after the device has stabilized.
2.01/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

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

Figures



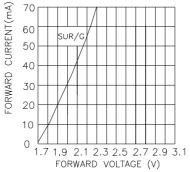


Figure2: FORWARD CURRENT Vs. FORWARD VOLTAGE

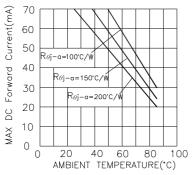


Figure4: SUR/G MAX DC FORWARD CURRENT VS AMBIENT TEMPERATURE

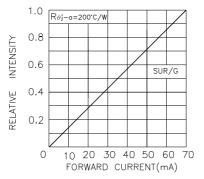


Figure3: RELATIVE INTENSITY Vs. FORWARD CURRENT

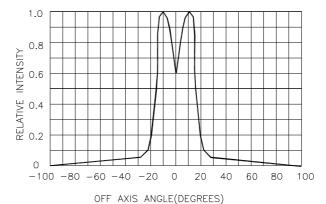
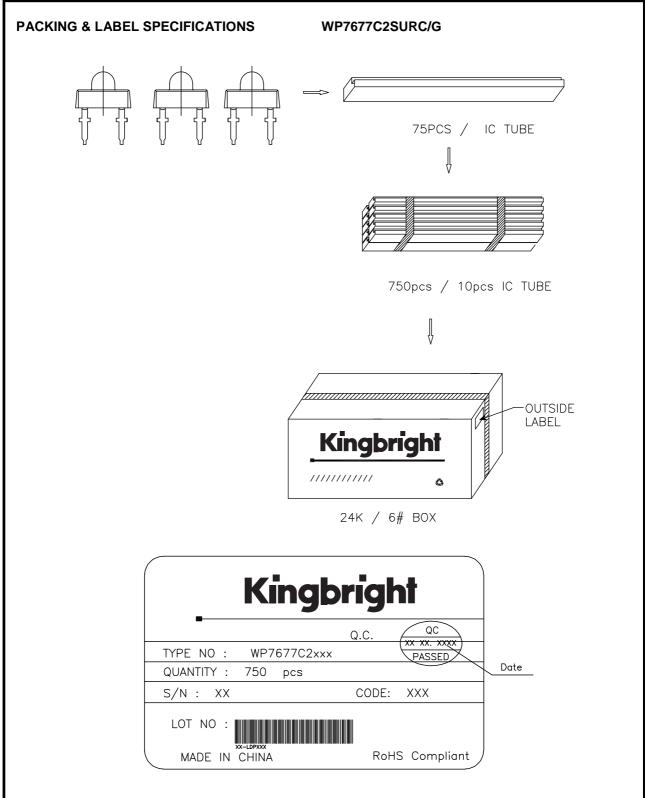


Figure 5: RELATIVE INTENSITY VS OFF AXIS ANGLE

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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.

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