Kingbright

PRELIMINARY SPEC

L-7700C4SURC-G

Technical Data

Features

∗ HIGH LUMINANCE OUTPUT.

∗ DESIGN FOR HIGH CURRENT OPERATION.

∗ SOLDERLESS MOUNTING TECHNIQUE.

∗ LOW POWER CONSUMPTION.

∗ LOW THERMAL RESISTANCE.

∗ LOW PROFILE.

∗ PACKAGED IN TUBES FOR USE WITH
  AUTOMATIC INSERTION EQUIPMENT.

∗ RoHS COMPLIANT.

Benefits

*Rugged Lighting Products.

*Electricity savings.

*Maintenance savings.

*Environmental Conformance.

Typical Applications

*Automotive Exterior Lighting.

*Solid State Lighting and Signaling.

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Outline Drawings

15.4[0.606]
12[0.472]
7.62[0.3]
Ø5[0.197]
Ø1.5[0.059]
7.62[0.3]
6[0.236]
1
2

3.3[0.13]
5[0.197]
4[0.157]
3°TYP

1 ○———▷|———○ 2

2.5[0.098]
0.5[0.02]
CATHODE
4.7[0.185]
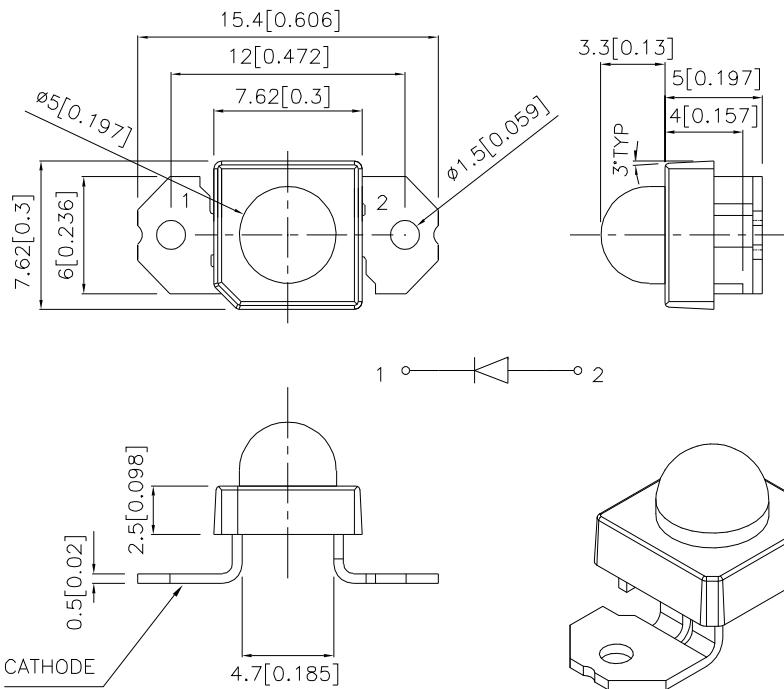
Notes:
1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25(0.01") unless otherwise noted.
3. Lead spacing is measured where the leads emerge from the package.
4. Specifications are subject to change without notice.

PATENT PENDING

Rivet
Base
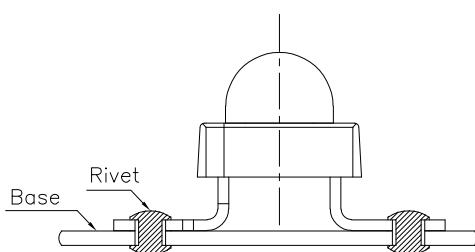
Absolute Maximum Ratings at TA=25°C

PARAMETER	SUR-G	UNITS
DC Forward Current	70	mA
Power dissipation	160	mW
Reverse Voltage	5	V
Operating Temperature	-40 To +85	˚C
Storage Temperature	-55 To +85	˚C

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Selection Guide

Part No.	LED COLOR	Iv(mcd)[1] @70mA Min.	Iv(mcd)[1] @70mA Typ.	Viewing Angle[2] 2θ1/2 Typ.
L-7700C4SURC-G	HYPER RED (InGaAlP)	4700	7000	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 $R_{\theta j\text{-}a}$=200°C/W

| DEVICE TYPE	PEAK WAVELENGTH λPEAK (nm) TYP.	DOMINANT[1] WAVELENGTH λDOM (nm) TYP.	SPECTRAL LINE WAVELENGTH Δλ1/2(nm) TYP.
L-7700C4SURC-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 $R_{\theta j\text{-}pin}$ °C/W TYP.
L-7700C4SURC-G	1.9	2.2	2.5	10	45	125

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Figures

SUR-G

RELATIVE INTENSITY Vs. WAVELENGTH

$T_A = 25°C$

FORWARD CURRENT Vs.
FORWARD VOLTAGE

RELATIVE INTENSITY Vs.
FORWARD CURRENT

$R_{\theta j-a} = 200°C/W$

MAX DC FORWARD CURRENT Vs.
AMBIENT TEMPERATURE

$R_{\theta j-a} = 100°C/W$
$R_{\theta j-a} = 150°C/W$
$R_{\theta j-a} = 200°C/W$

RELATIVE INTENSITY VS OFF AXIS ANGLE
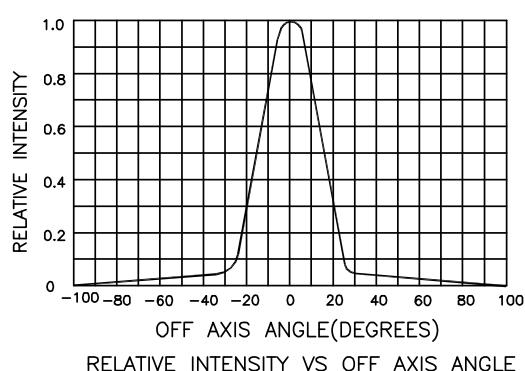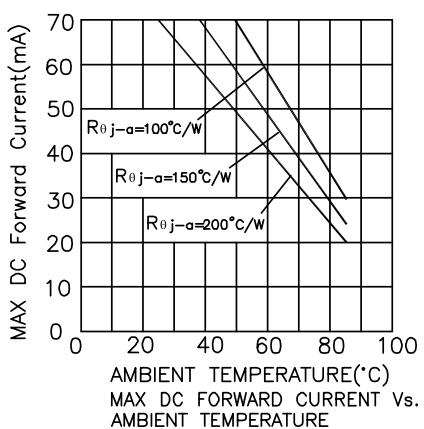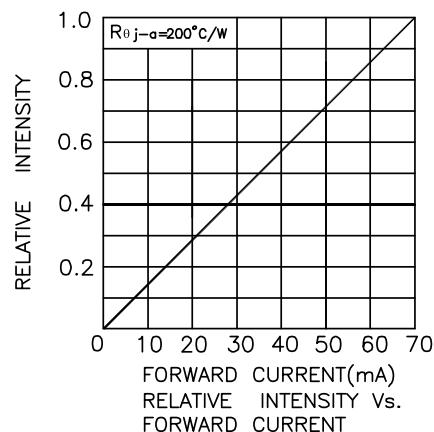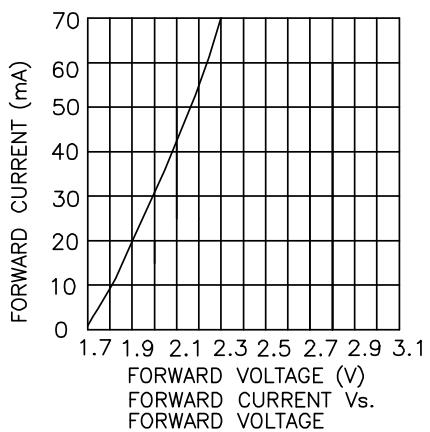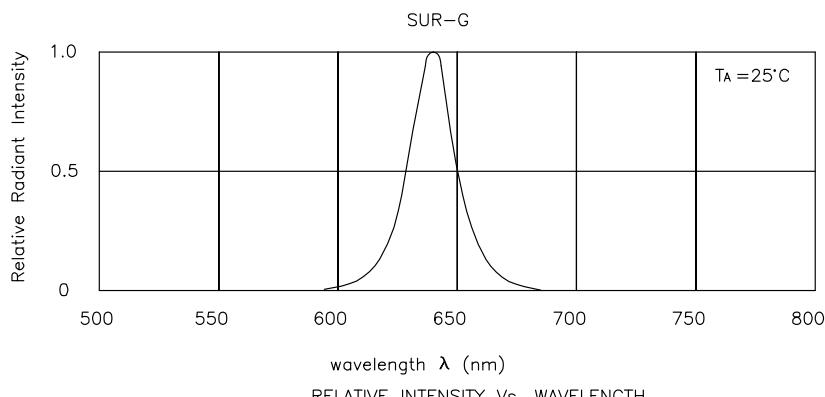
Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength),

the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm

2. Luminous Intensity: +/-15%

3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.