Kingbright

PRELIMINARY SPEC

L-7700C4SEC-H

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.

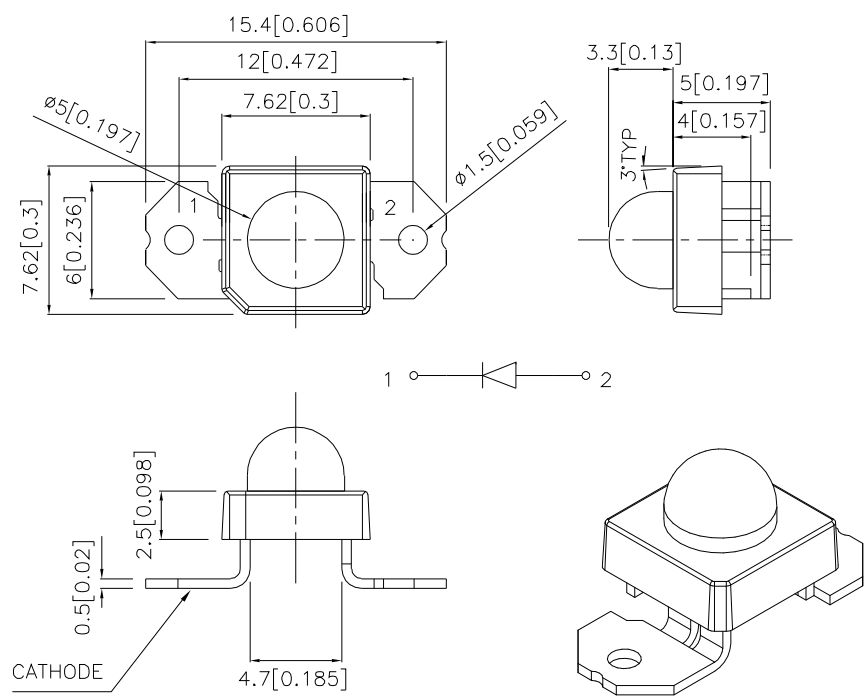## Benefits

*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]

3.3[0.13]
5[0.197]
4[0.157]
3°TYP

2.5[0.098]
0.5[0.02]
CATHODE
4.7[0.185]

PATENT PENDING

Rivet
Base

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.
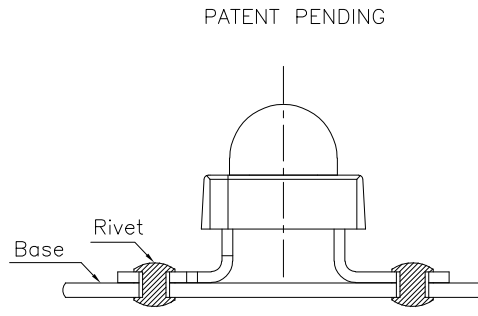
Absolute Maximum Ratings at TA=25°C

PARAMETER	SE-H	UNITS
DC Forward Current	70	mA
Power dissipation	200	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(cd)[1] @70mA Min.	Iv(cd)[1] @70mA Typ.	Viewing Angle[2] 2θ1/2 Typ.
L-7700C4SEC-H	HYPER ORANGE (InGaAlP)	6.7	12	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

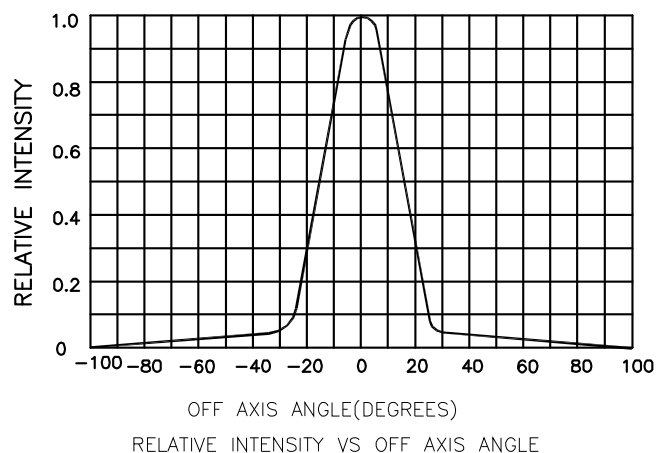| DEVICE TYPE	PEAK WAVELENGTH λPEAK (nm) TYP.	DOMINANT[1] WAVELENGTH λDOM (nm) TYP.	SPECTRAL LINE WAVELENGTH Δλ1/2(nm) TYP.
L-7700C4SEC-H	640	630	25

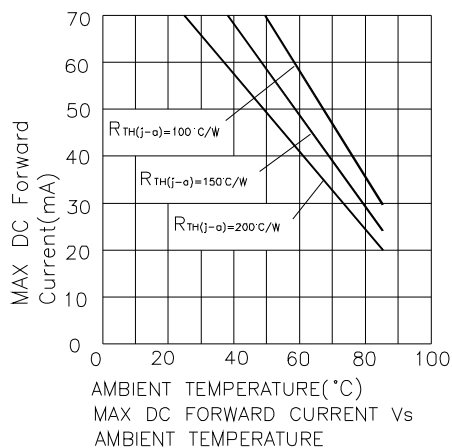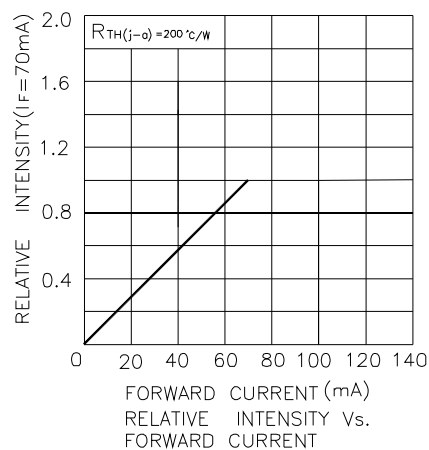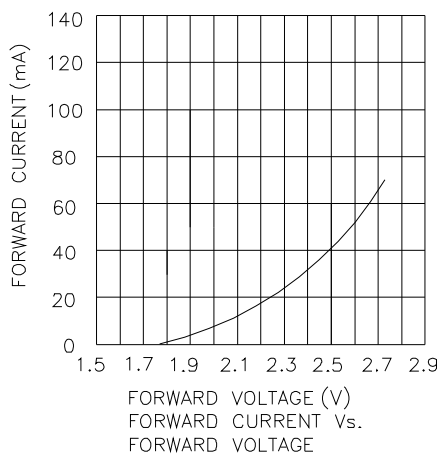Note:
1.The dominant wavelength is derived from the CIE Chromaticity Diagram and represents the perceived color of the device.

Electrical Characteristics at TA=25°C

DEVICE TYPE	FORWARD VOLTAGE VF(VOLTS) @ IF=70mA MIN.	FORWARD VOLTAGE VF(VOLTS) @ IF=70mA TYP.	FORWARD VOLTAGE VF(VOLTS) @ IF=70mA MAX.	REVERSE CURRENT IR (uA) @ VR=5V MAX.	CAPACITANCE C (pF) @ VF=0V F=1MHZ TYP.	THERMAL RESISTANCE Rθj-pin °C/W TYP.
L-7700C4SEC-H	2.5	2.7	3.1	10	27	125

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Figures

SE-H
$T_A = 25°C$
RELATIVE INTENSITY Vs. WAVELENGTH
(Relative Radiant Intensity vs. wavelength λ (nm))

FORWARD CURRENT Vs. FORWARD VOLTAGE
(FORWARD CURRENT (mA) vs FORWARD VOLTAGE (V))

RELATIVE INTENSITY Vs. FORWARD CURRENT
$R_{TH(j-a)} = 200°C/W$
RELATIVE INTENSITY ($I_F = 70mA$) vs FORWARD CURRENT (mA)

MAX DC FORWARD CURRENT Vs AMBIENT TEMPERATURE
$R_{TH(j-a)} = 100°C/W$
$R_{TH(j-a)} = 150°C/W$
$R_{TH(j-a)} = 200°C/W$
MAX DC Forward Current (mA) vs AMBIENT TEMPERATURE (°C)

RELATIVE INTENSITY VS OFF AXIS ANGLE
RELATIVE INTENSITY vs OFF AXIS ANGLE (DEGREES)

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.