Kingbright

P/N: L-7677C2SYC-H

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.

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Outline Drawings

7.62[0.3]

C1.2

7.62[0.3]

R0.7[R0.028]

⌀3.2[0.126]

2.5[0.098]

5[0.197]

4.4[0.173]

1.0MAX.

5[0.197] TYP.

1.5[0.059]

0.4[0.016]

0.75[0.03]

CATHODE

5.08[0.2]

5°TYP.

2.5[0.098]

0.4[0.016]

5.08[0.2]
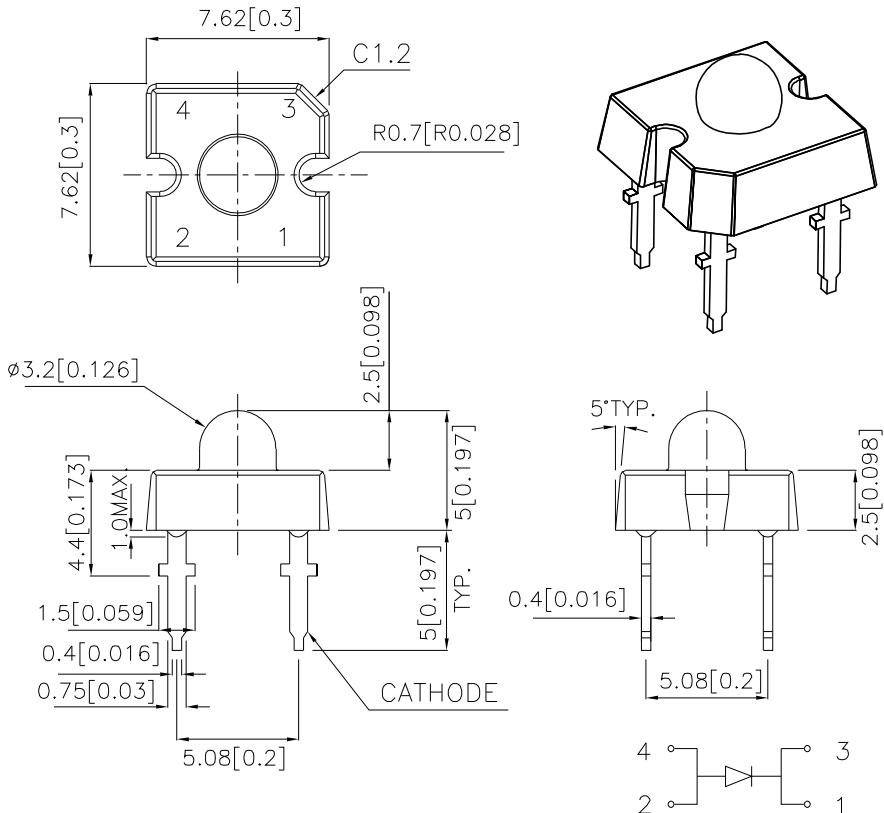
Notes:
1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25(0.01") unless otherwise noted.
3. Lead spacing is measured where the leads emerge from the package.
4. Specifications are subject to change without notice.

Absolute Maximum Ratings at TA=25°C

PARAMETER	SY-H	UNITS
DC Forward Current	70	mA
Power dissipation	245	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	Iv(cd)[1] @70mA Min.	Typ.	Viewing Angle[2] 2θ1/2 Typ.
L-7677C2SYC-H	TS InGaAlP YELLOW	1.5	5	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 $R_{θj-a}$=200°C/W

DEVICE TYPE	PEAK WAVELENGTH λPEAK (nm) TYP.	DOMINANT[1] WAVELENGTH λDOM (nm) TYP.	SPECTRAL LINE WAVELENGTH Δλ1/2(nm) TYP.
SY-H	590	589	20

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.	TYP.	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.
SY-H	2.6	2.9	3.5	10	45	125

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Figures

RELATIVE INTENSITY Vs. WAVELENGTH

FORWARD CURRENT Vs. FORWARD VOLTAGE

RELATIVE INTENSITY Vs. FORWARD CURRENT

MAX DC FORWARD CURRENT Vs AMBIENT TEMPERATURE

RELATIVE INTENSITY VS OFF AXIS ANGLE
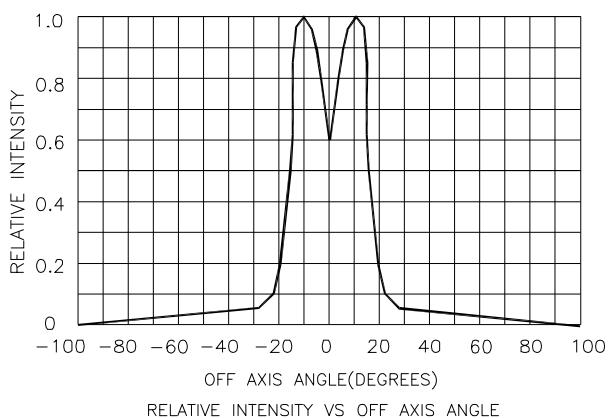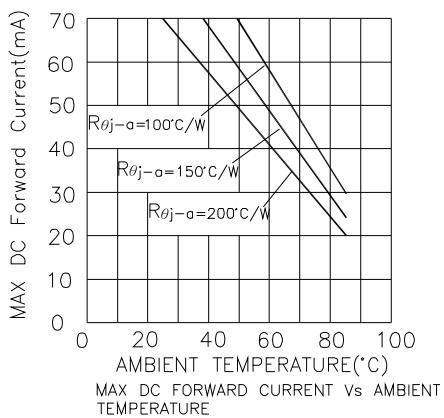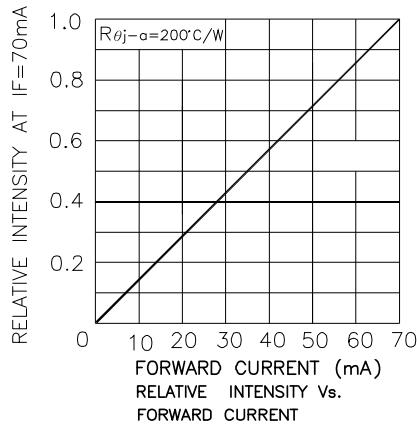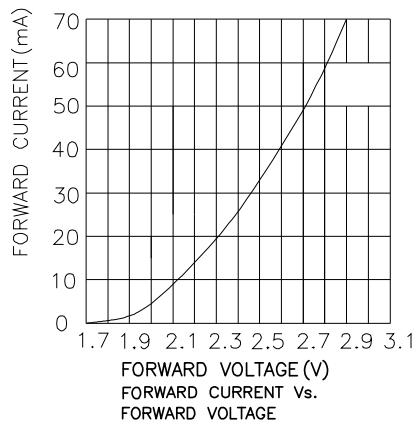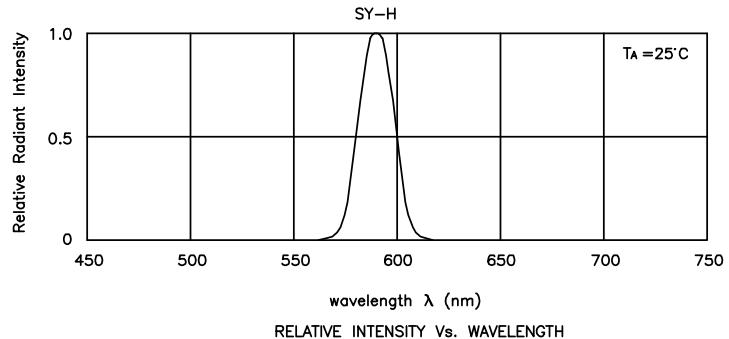
Remarks:

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.