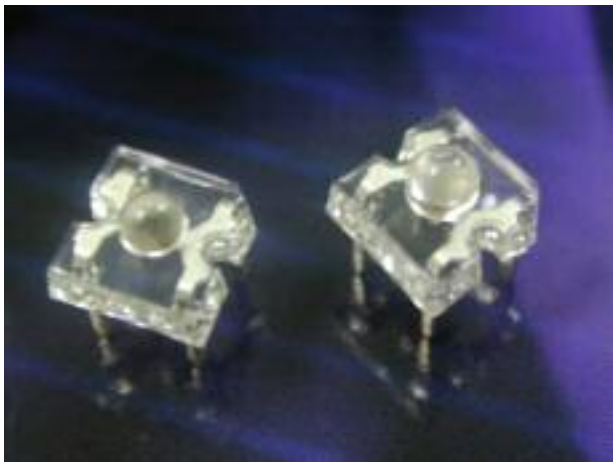
P/N: L-7677C2SYC-H



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.

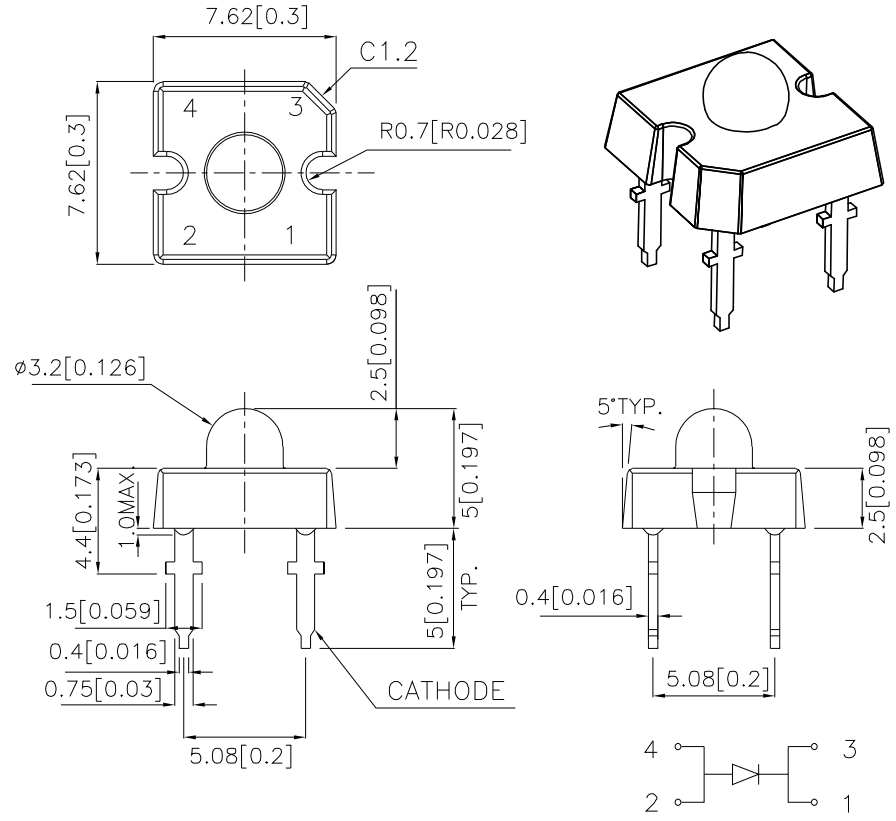
Typical Applications:

*****Automotive Exterior Lighting.

*****Electronic Signs and Signals.

*****Specialty Lighting.

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	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.

Selection Guide

Part No.	LED COLOR	Iv(cd)[1] @70mA Min.	Iv(cd)[1] @70mA 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 $R_{\theta j-a}$=200°C/W

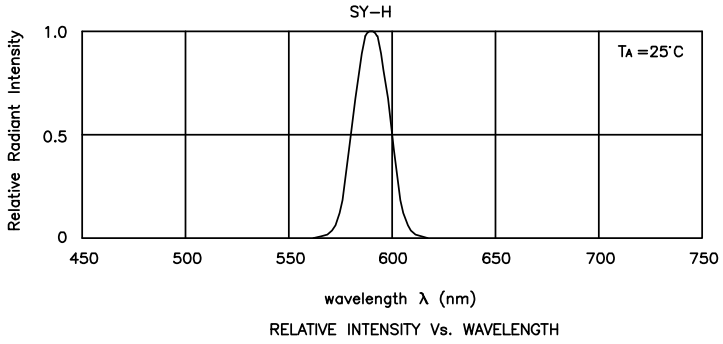
DEVICE TYPE	PEAK WAVELENGTH λPEAK (nm) TYP.	DOMINANT[1] WAVELENGTH λDOM (nm) TYP.	SPECTRAL LINE WAVELENGTH Δλ1/2(nm) TYP.
SY-H	590	589	20

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

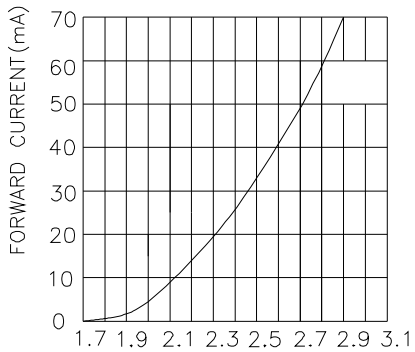
Electrical Characteristics at TA=25°C

DEVICE TYPE	FORWARD VOLTAGE V_F(VOLTS) @ I_F=70mA MIN.	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.
SY-H	2.6	2.9	3.5	10	45	125

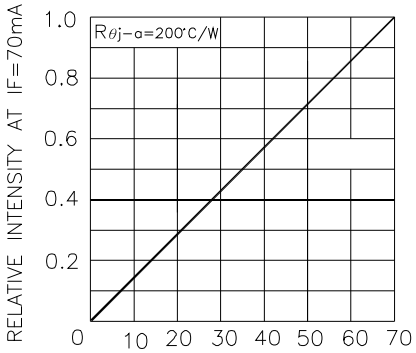
Figures



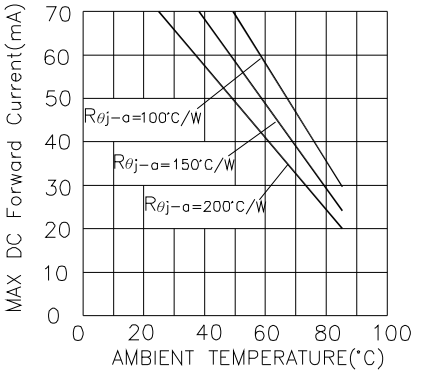
RELATIVE INTENSITY Vs. WAVELENGTH



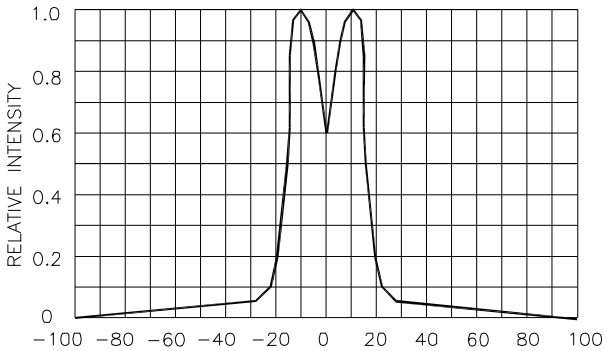
FORWARD CURRENT Vs. FORWARD VOLTAGE



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.