

PRELIMINARY SPEC

P/N: L-7679C1PBC-H



## Technical Data



**ATTENTION**  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
DISCHARGE  
SENSITIVE  
DEVICES

### Description

Static electricity and surge damage the LEDs. It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs. All devices, equipment and machinery must be electrically grounded.

### 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.

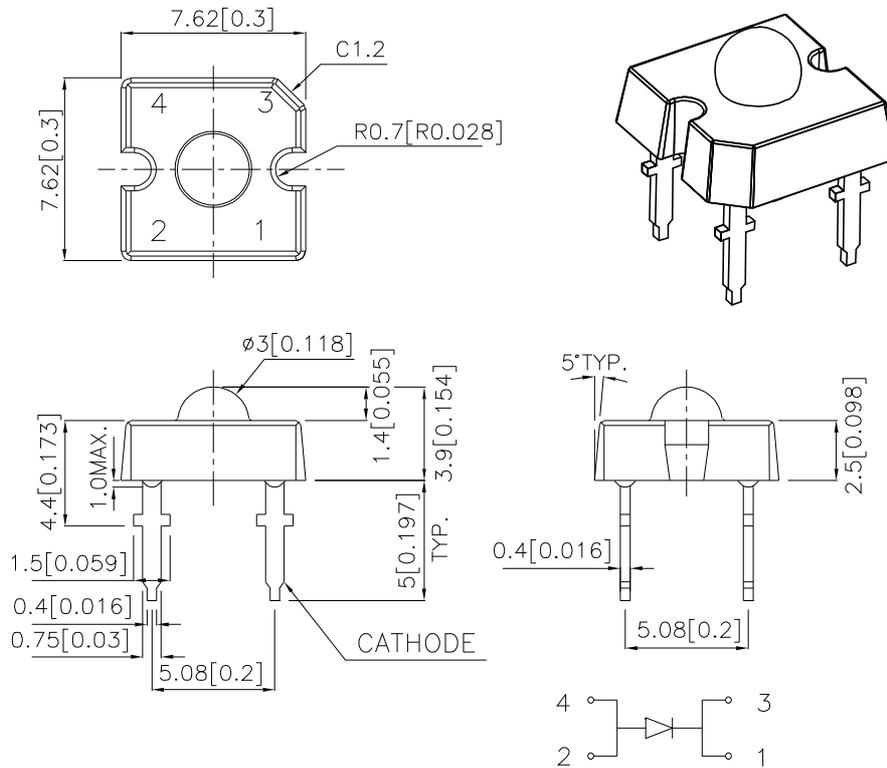
### Benefits:

- \*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  $\pm 0.25(0.01")$  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 $T_A=25^\circ\text{C}$

PARAMETER	PB-H	UNITS
DC Forward Current <sup>[1]</sup>	50	mA
Power dissipation	235	mW
Reverse Voltage	5	V
Operating Temperature	-40 To +85	$^\circ\text{C}$
Storage Temperature	-55 To +85	$^\circ\text{C}$
Lead Solder Temperature <sup>[2]</sup>	260 $^\circ\text{C}$ For 5 Seconds	

1. Derate as shown in Figures 4.

2. 1.5mm[0.06inch] below seating plane.

## Selection Guide

Part No.	LED COLOR	Iv(cd) <sup>[1]</sup> @50mA		Viewing Angle <sup>[2]</sup>
		Min.	Typ.	2θ1/2 Typ.
L-7679C1PBC-H	InGaN BLUE	1.2	2.4	70°

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=50mA Rθj-a=200°C/W

DEVICE TYPE	PEAK WAVELENGTH λPEAK (nm) TYP.	DOMINANT <sup>[1]</sup> WAVELENGTH λDOM (nm) TYP.	SPECTRAL LINE WAVELENGTH Δλ1/2(nm) TYP.
PB-H	467	470	30

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=50mA			REVERSE CURRENT IR (uA) @ VR=5V	CAPACITANCE C (pF) @ VF=0V F=1MHZ	THERMAL RESISTANCE Rθj-pin °C/W
	MIN.	TYP.	MAX.	MAX.	TYP.	TYP.
PB-H	3.8	4.4	4.7	10	110	130

## Figures

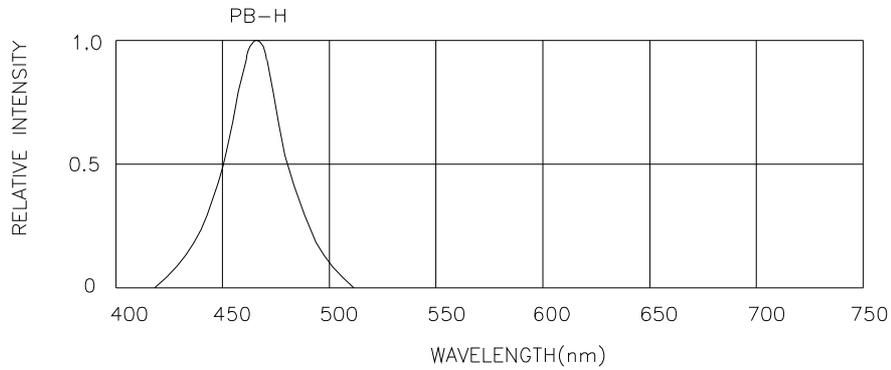


Figure1: RELATIVE INTENSITY VS. WAVELENGTH

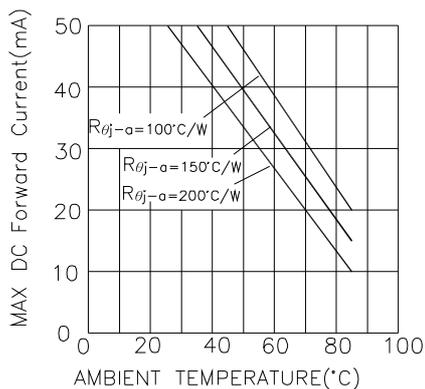
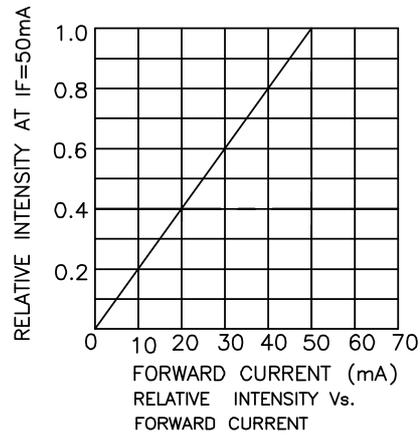
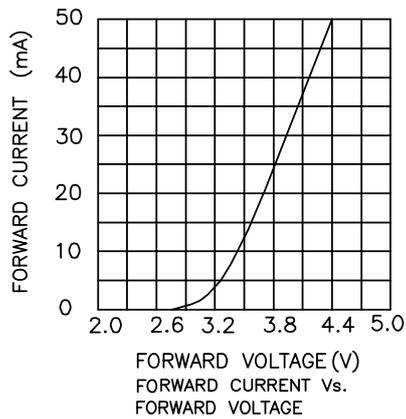
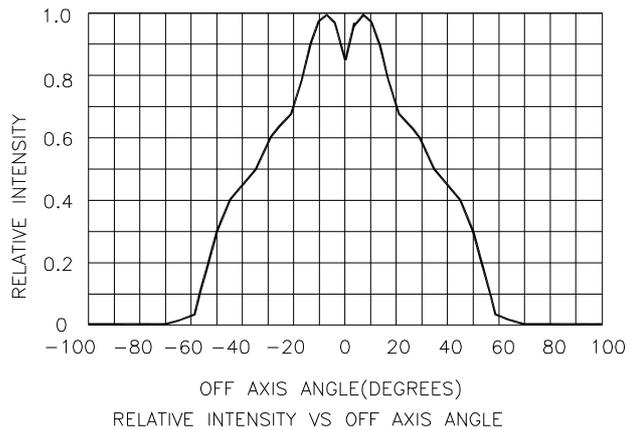


Figure4:PB-H MAX DC FORWARD CURRENT vs AMBIENT TEMPERATURE



### 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:  $\pm 1\text{nm}$
2. Luminous Intensity/ luminous flux:  $\pm 15\%$
3. Forward Voltage:  $\pm 0.1\text{V}$

Note: Accuracy may depend on the sorting parameters.