

P/N: L-7677C2PBC-H



Technical Data



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Benefits:

*High Luminance output.

*Outstanding Material Efficiency.

*Design for High Current Operation.

*Electricity savings.

*Uniform Color.

*Maintenance savings.

*Low Power Consumption.

*Reliable and Rugged.

*Low Thermal Resistance.

Typical Applications:

*Low Profile.

*Automotive Exterior Lighting.

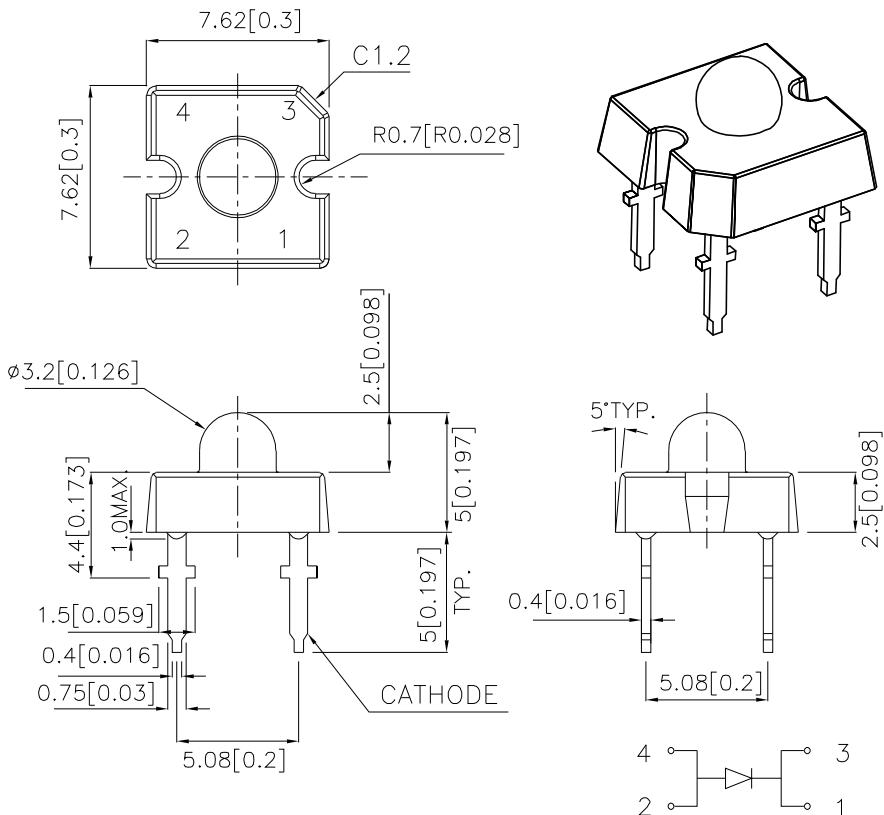
*Packaged in tubes for use with
automatic insertion equipment.

*Electronic Signs and Signals.

*RoHS Compliant.

*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 | PB-H | UNITS |
|--|---------------------|-------|
| DC Forward Current | 50 | mA |
| Power dissipation | 235 | 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 | I _{v(cd)} ^[1] @50mA | | Viewing Angle ^[2] 2θ1/2 Typ. |
|---------------|------------|--|------|---|
| | | Min. | Typ. | |
| L-7677C2PBC-H | InGaN BLUE | 3.3 | 6.0 | 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=50mA R_{θj-a}=200°C/W

| DEVICE TYPE | PEAK WAVELENGTH λ _{PEAK} (nm) TYP. | DOMINANT ^[1] WAVELENGTH λ _{DOM} (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 V _F (VOLTS) @ I _F =50mA | | | REVERSE CURRENT I _R (uA) @ V _R =5V | CAPACITANCE C (pF) @ V _F =0V F=1MHZ | THERMAL RESISTANCE R _{θj-pin} °C/W |
|----------------|--|------|------|---|---|--|
| | MIN. | TYP. | MAX. | MAX. | TYP. | TYP. |
| PB-H | 3.8 | 4.4 | 4.7 | 10 | 110 | 130 |

Figures

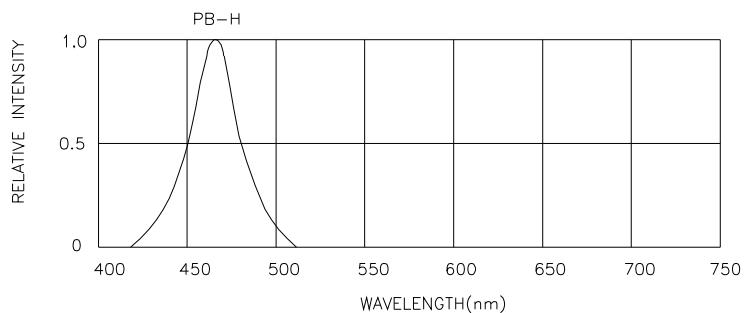
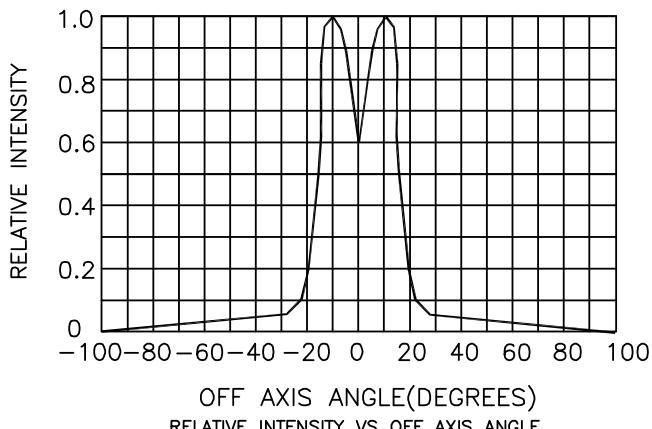
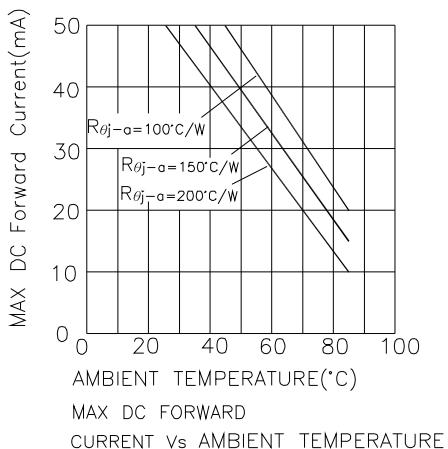
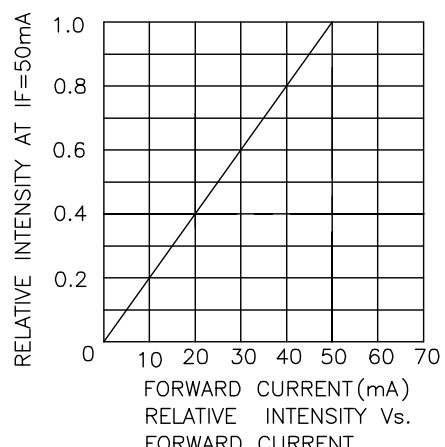
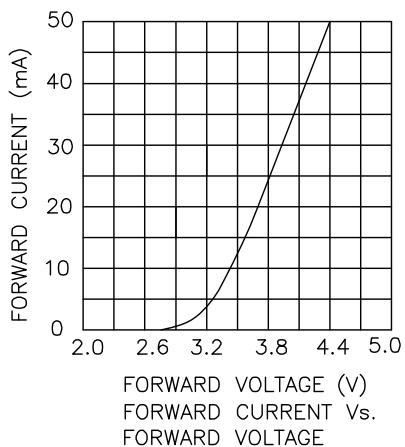


Figure1: RELATIVE INTENSITY VS. WAVELENGTH



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.