

PRELIMINARY SPEC

L-7700C4PBC-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.
- * SOLDERLESS MOUNTING TECHNIQUE.
- * LOW POWER CONSUMPTION.
- * LOW THERMAL RESISTANCE.
- * LOW PROFILE.
- * PACKAGED IN TUBES FOR USE WITH AUTOMATIC INSERTION EQUIPMENT.
- * RoHS COMPLIANT.

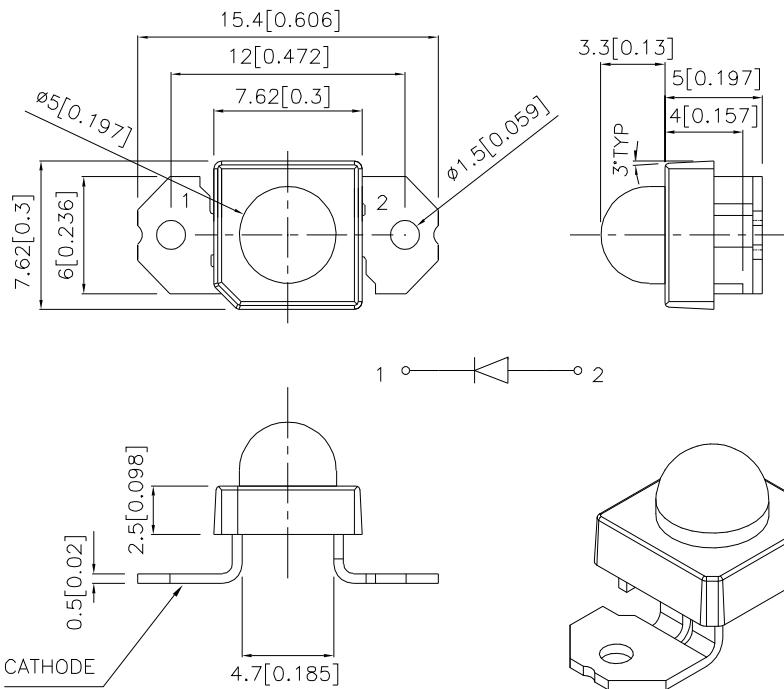
Benefits

- *Rugged Lighting Products.
- *Electricity savings.
- *Maintenance savings.
- *Environmental Conformance.

Typical Applications

- *Automotive Exterior Lighting.
- *Solid State Lighting and Signaling.

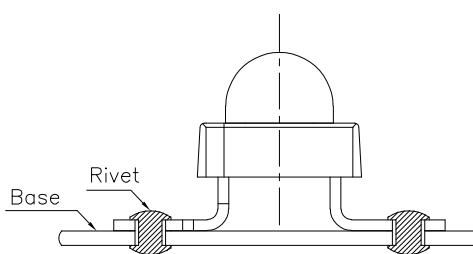
Outline Drawings



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.

PATENT PENDING



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

Selection Guide

Part No.	LED COLOR	I _v (mcd) ^[1] @50mA		Viewing Angle ^[2] 2θ1/2	
		Min.	Typ.	Typ.	Typ.
L-7700C4PBC-H	BLUE (InGaN)	3800	5700	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	DOMINANT ^[1] WAVELENGTH	SPECTRAL LINE WAVELENGTH
	λ _{PEAK} (nm) TYP.	λ _{DOM} (nm) TYP.	Δλ1/2(nm) TYP.
L-7700C4PBC-H	467	470	30

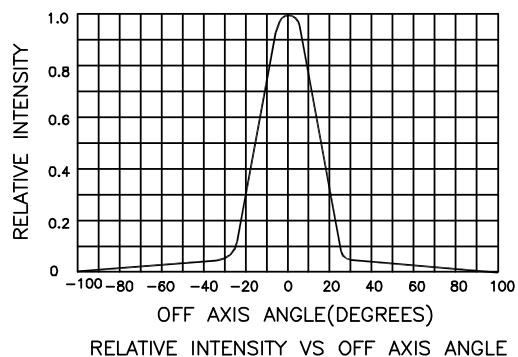
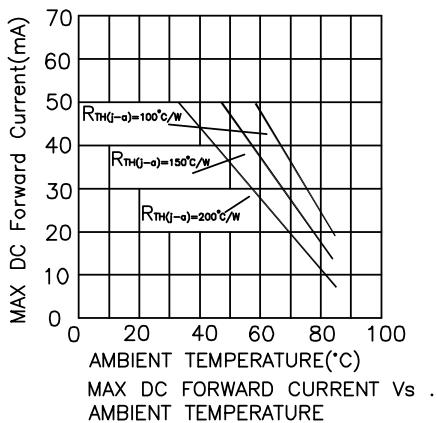
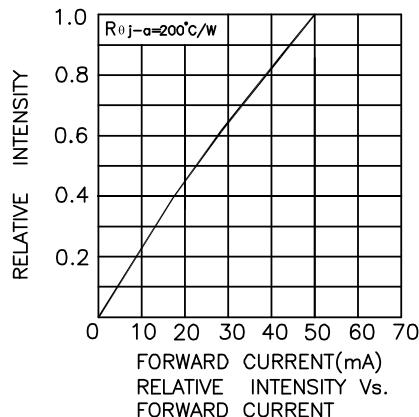
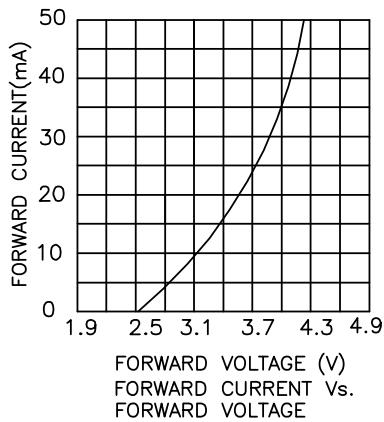
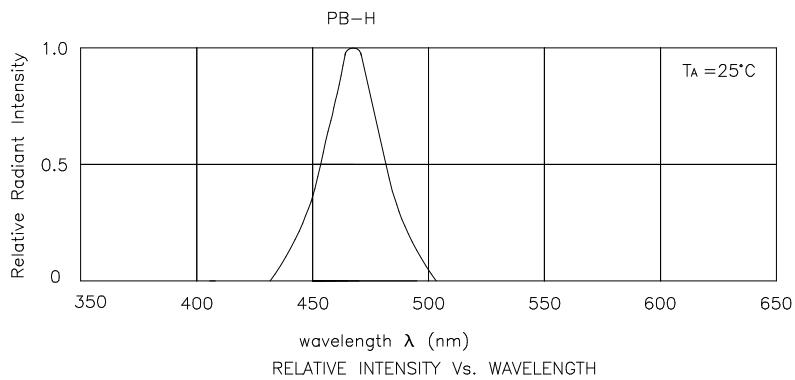
Note:

- 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)			REVERSE CURRENT	CAPACITANCE	THERMAL RESISTANCE R _{θj-pin} °C/W
	@ I _F =50mA			I _r (uA) @ V _R =5V	C (pF) @ V _F =0V F=1MHZ	
	MIN.	TYP.	MAX.	MAX.	TYP.	TYP.
L-7700C4PBC-H	4.2	4.4	4.7	10	110	130

Figures



Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm
2. Luminous Intensity: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.