

### PRELIMINARY SPEC

Part Number: L-7700C4PBC-Z-DTS



#### 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.

### 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.

#### Benefits

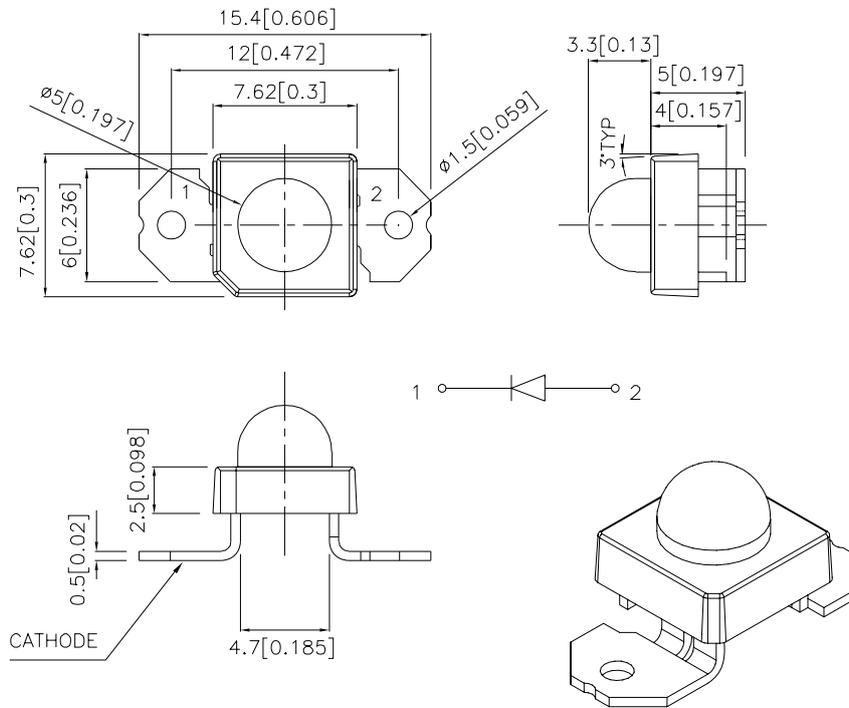
- \*Rugged Lighting Products.
- \*Electricity savings.
- \*Maintenance savings.
- \*Environmental Conformance.

#### Typical Applications

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

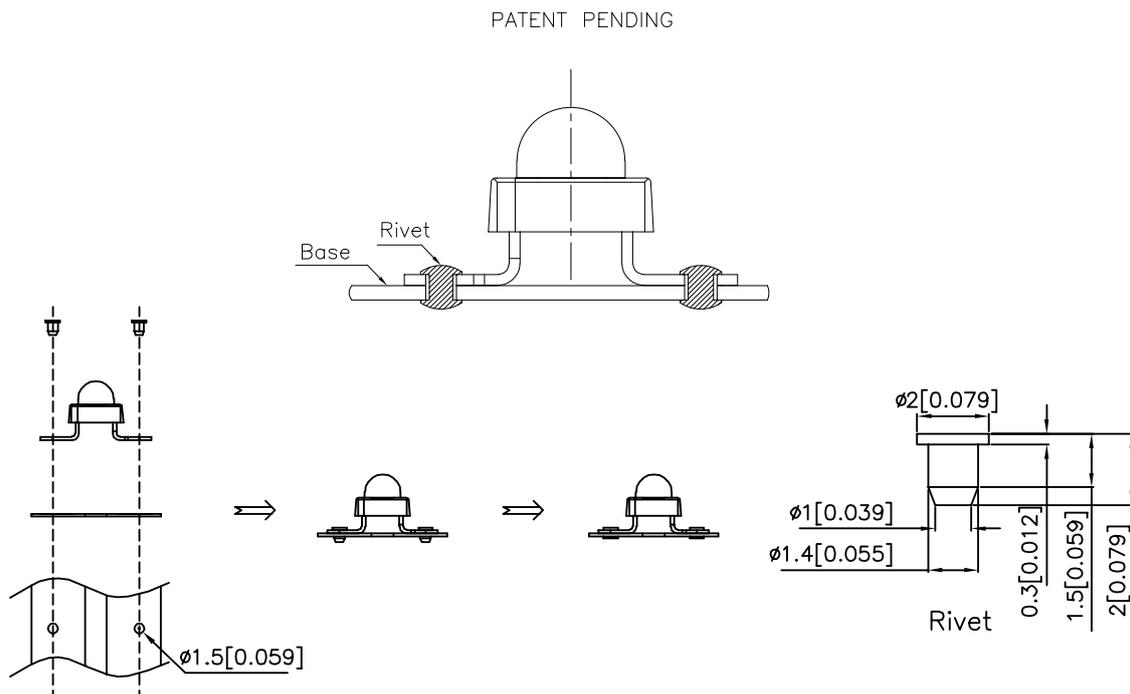


## Outline Drawings



**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.



## Absolute Maximum Ratings at TA=25°C

PARAMETER	PB-Z	UNITS
DC Forward Current	50	mA
Power dissipation	210	mW
Reverse Voltage	5	V
Operating Temperature	-40 To +85	°C
Storage Temperature	-55 To +85	°C

## Selection Guide

Part No.	LED COLOR	Iv(cd) <sup>[1]</sup> @50mA		Viewing Angle <sup>[2]</sup>
		Min.	Typ.	2θ1/2 Typ.
L-7700C4PBC-Z-DTS	BLUE (InGaN)	3.8	8	25°

Notes:

- 1.Luminous intensity is measured with an integrating sphere after the device has stabilized; Luminous intensity / luminous flux: +/-15%.
- 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	PEAK WAVELENGTH	DOMINANT <sup>[1]</sup> WAVELENGTH	SPECTRAL LINE WAVELENGTH
TYPE	λPEAK (nm) TYP.	λDOM (nm) TYP.	Δλ1/2(nm) TYP.
L-7700C4PBC-Z-DTS	458	465	22

Note:

- 1.The dominant wavelength is derived from the CIE Chromaticity Diagram and represents the perceived color of the device; Wavelength: +/-1nm.

## Electrical Characteristics at TA=25°C

DEVICE	FORWARD VOLTAGE		REVERSE CURRENT	CAPACITANCE	THERMAL
	VF(VOLTS) <sup>[1]</sup>		IR (uA)	C (pF)	RESISTANCE
	@ IF=50mA		@ VR=5V	@ VF=0V F=1MHZ	Rθj-pin °C/W
TYPE	TYP.	MAX.	MAX.	TYP.	TYP.
L-7700C4PBC-Z-DTS	3.5	4.2	10	110	130

Note:

1. Forward Voltage: +/-0.1V.

## Figures

