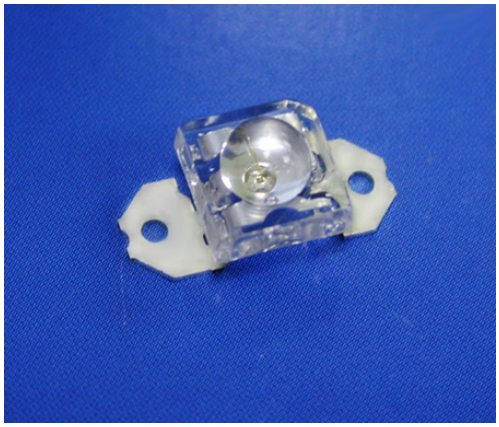
PRELIMINARY SPEC

Part Number: L-7701C4PBC-Z-DTS

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.

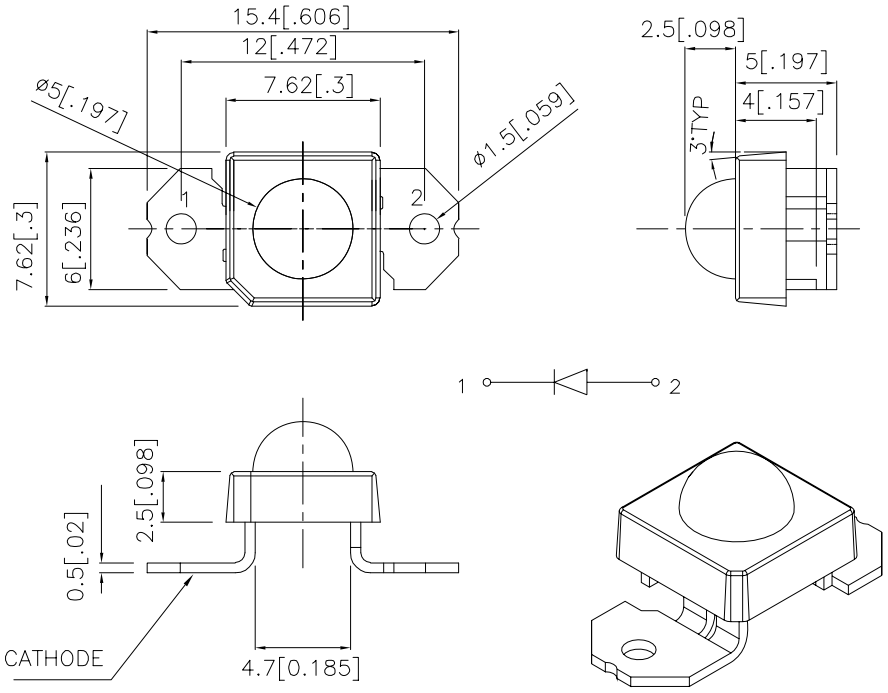
Benefits

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

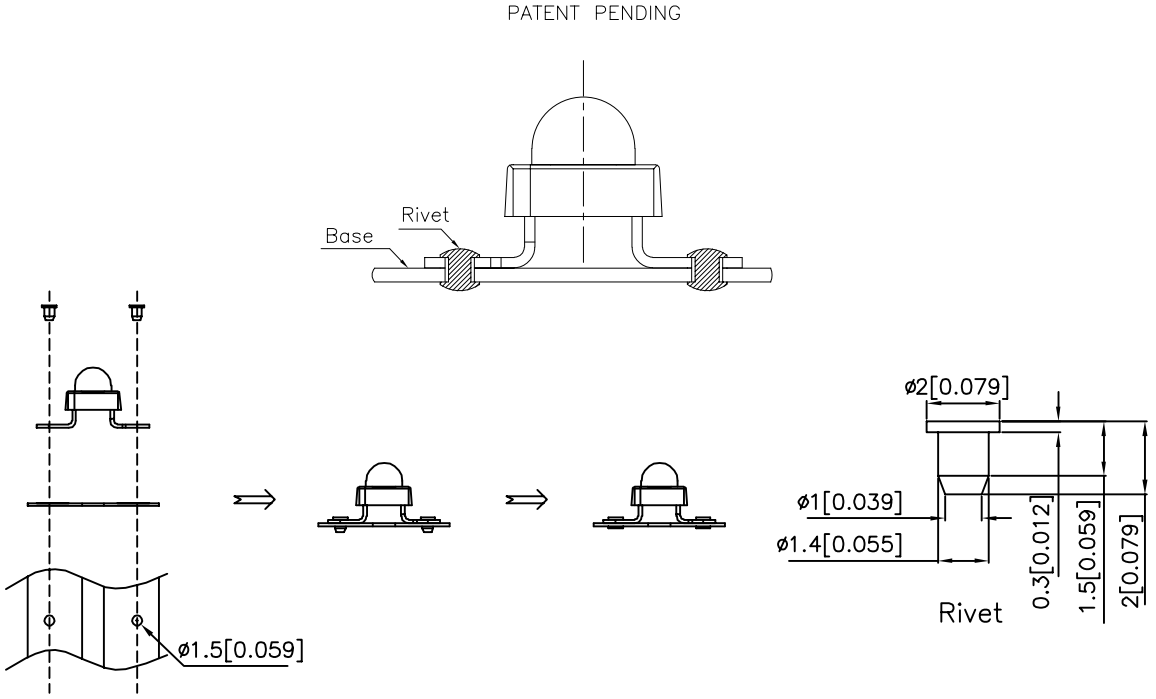
Typical Applications

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

Outline Drawings



Notes:
1. All dimensions are in millimeters (inches).
2. Tolerance is ±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.



Kingbright

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)[1] @50mA		Viewing Angle[2] 2θ1/2
		Min.	Typ.	Typ.
L-7701C4PBC-Z-DTS	BLUE (InGaN)	1.8	3.5	50°

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

I_F=50mA $R_{\theta j\text{-}a}$=200°C/W

DEVICE TYPE	PEAK WAVELENGTH λPEAK (nm) TYP.	DOMINANT[1] WAVELENGTH λDOM (nm) TYP.	SPECTRAL LINE WAVELENGTH Δλ1/2(nm) TYP.
PB-Z	458	465	22

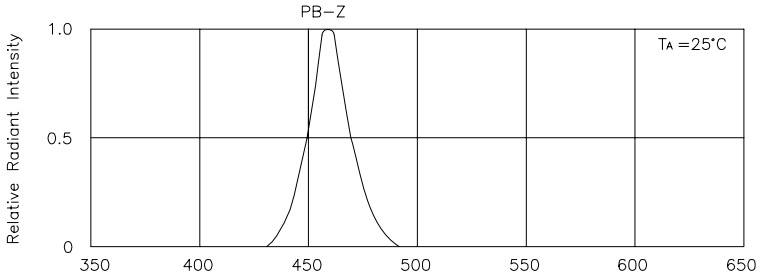
Note:
1.The dominant wavelength is derived from the CIE Chromaticity Diagram and represents the perceived color of the device; Wavelength: +/-1nm.

Electrical Characteristics at TA=25°C

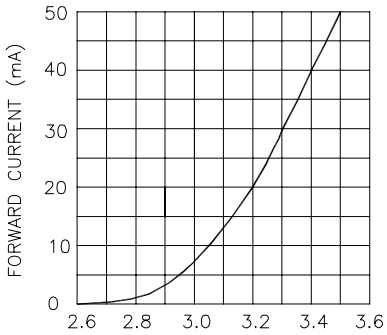
DEVICE TYPE	FORWARD VOLTAGE V_F(VOLTS)[1] @ I_F=50mA		REVERSE CURRENT I_R (uA) @ V_R=5V	CAPACITANCE C (pF) @ V_F=0V F=1MHZ	THERMAL RESISTANCE Rθj-pin °C/W
	TYP.	MAX.	MAX.	TYP.	TYP.
PB-Z	3.5	4.2	10	110	130

Note:
1. Forward Voltage: +/-0.1V.

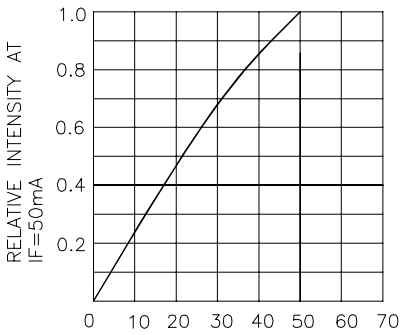
Figures



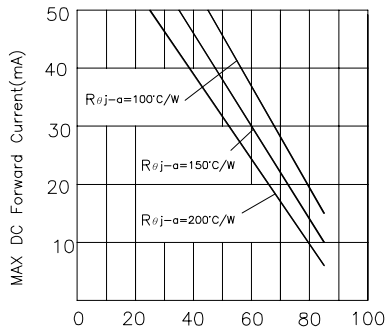
RELATIVE INTENSITY Vs. WAVELENGTH



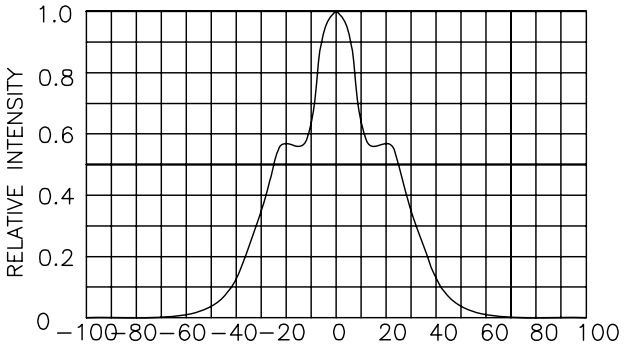
FORWARD CURRENT Vs.
FORWARD VOLTAGE



RELATIVE INTENSITY Vs.
FORWARD CURRENT



MAX DC FORWARD CURRENT Vs
AMBIENT TEMPERATURE



RELATIVE INTENSITY VS OFF AXIS ANGLE