PRELIMINARY SPEC

Part Number: L-7678C2PBC-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.
*Uniform Color.
*Low Power Consumption.
*Low Thermal Resistance.
*Low Profile.
*Packaged in tubes for use with automatic insertion equipment.
*RoHS Compliant.

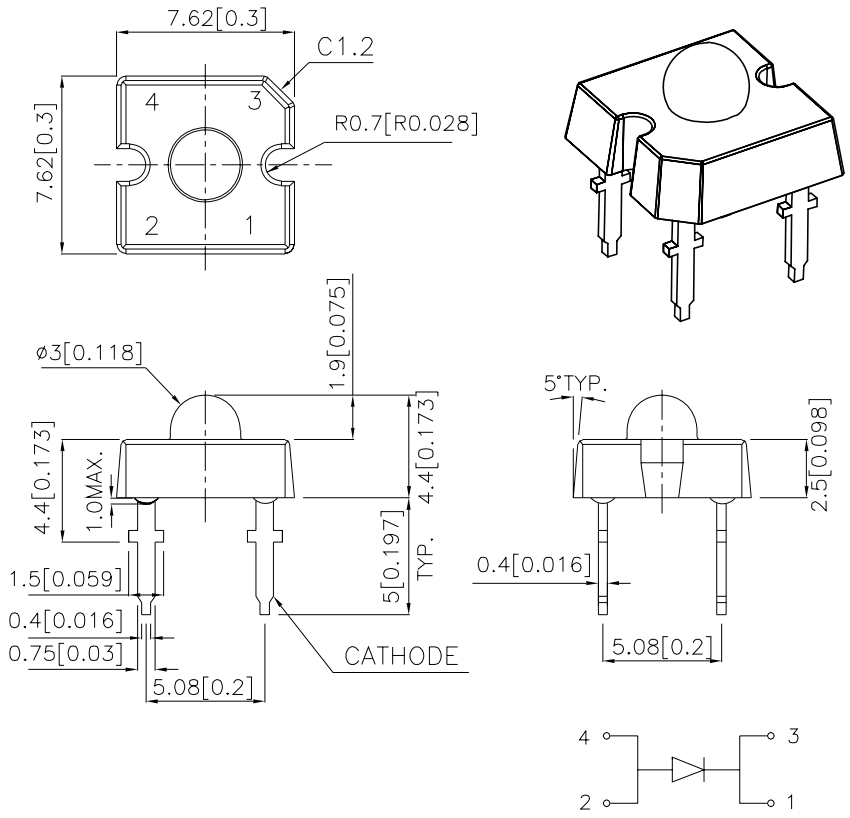
Benefits:

*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 ±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
Lead Solder Temperature[1]	260°C For 5 Seconds	

1.1.5mm[0.06inch]below seating plane.

Selection Guide

Part No.	LED COLOR	Iv(cd)[1] @50mA Min.	Iv(cd)[1] @50mA Typ.	Viewing Angle[2] 2θ1/2 Typ.
L-7678C2PBC-Z-DTS	InGaN BLUE	3.3	7	30°

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 $R_{\theta j-a}$=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

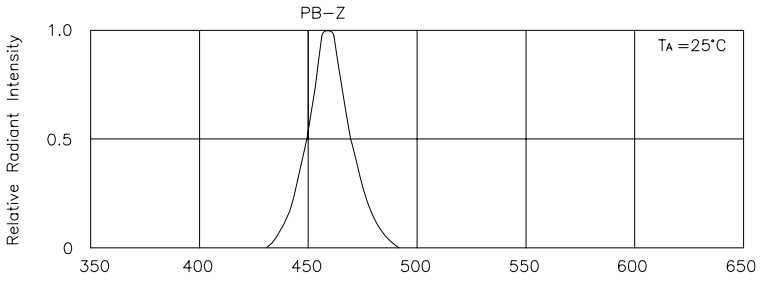
Note:
1.The dominant wavelength is derived from the CIE Chromaticity Diagram and represents the perceived color of the device; Wavelength: +/-1nm.

Electrical Characteristics at TA=25°C

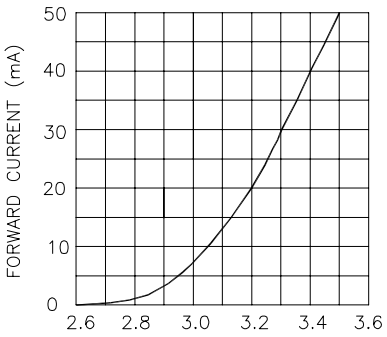
DEVICE TYPE	FORWARD VOLTAGE V_F(VOLTS)[1] @ I_F=50mA TYP.	FORWARD VOLTAGE V_F(VOLTS)[1] @ I_F=50mA MAX.	REVERSE CURRENT I_R (uA) @ V_R=5V MAX.	CAPACITANCE C (pF) @ V_F=0V F=1MHZ TYP.	THERMAL RESISTANCE Rθj-pin °C/W TYP.
PB-Z	3.5	4.2	10	110	130

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

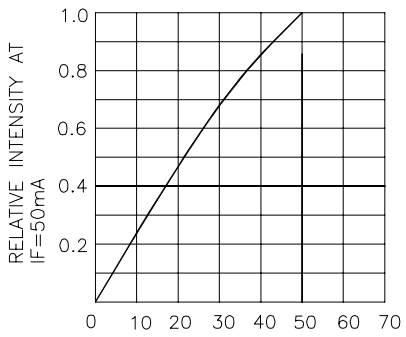
Figures



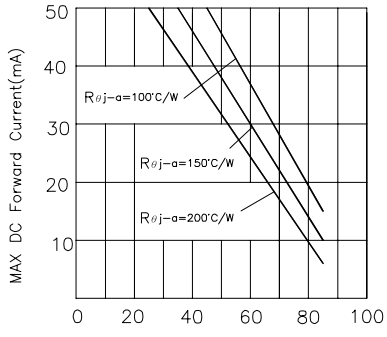
RELATIVE INTENSITY Vs. WAVELENGTH



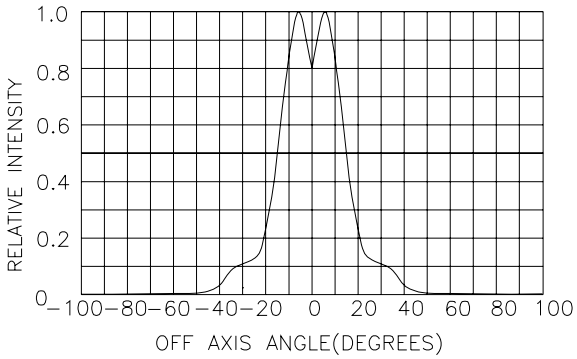
FORWARD CURRENT Vs.
FORWARD VOLTAGE



RELATIVE INTENSITY Vs.
FORWARD CURRENT



MAX DC FORWARD CURRENT Vs
AMBIENT TEMPERATURE



RELATIVE INTENSITY VS OFF AXIS ANGLE