

PRELIMINARY SPEC

Part Number: WP7678C2PBC/Z



## 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.
- \* Soldering methods: Wave soldering .
- \* RoHS Compliant.

### Benefits:

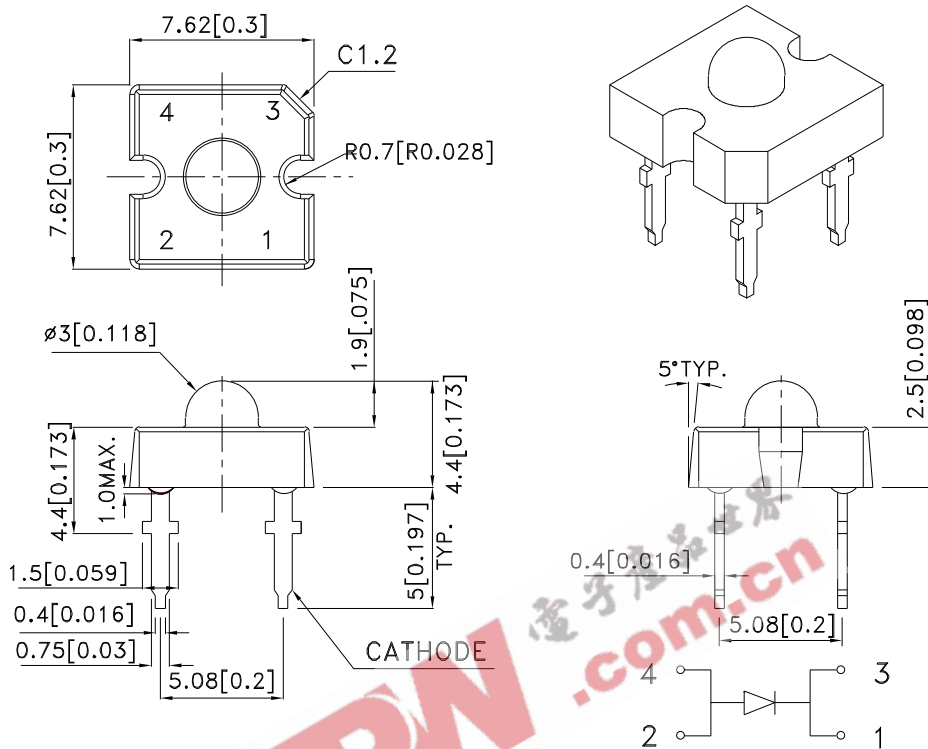
- \*Outstanding Material Efficiency.
- \*Electricity savings.
- \*Maintenance savings.
- \*Reliable and Rugged.

### Typical Applications:

- \*Automotive Exterior Lighting.
- \*Electronic Signs and Signals.
- \*Specialty Lighting.



## Outline Drawings



**Notes:**

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25(0.01")$  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 $T_A=25^\circ\text{C}$

PARAMETER	PB/Z	UNITS
DC Forward Current	50	mA
Power dissipation	210	mW
Reverse Voltage	5	V
Operating Temperature	-40 To +85	$^\circ\text{C}$
Storage Temperature	-55 To +85	$^\circ\text{C}$
Lead Solder Temperature[1]	260 $^\circ\text{C}$ For 5 Seconds	

1. 1.5mm[0.06inch] below seating plane.  
NO Reflow soldering .

## Selection Guide

Part No.	LED COLOR	Iv(cd)[1] @50mA		Φv(lm)[1] @50mA Typ.	Viewing Angle[2] 2θ1/2 Typ.
		Min.	Typ.		
WP7678C2PBC/Z	Blue (InGaN)	3.3	7	2.6	30°

Notes:

- Luminous intensity is measured with an integrating sphere after the device has stabilized; Luminous Intensity / luminous flux: +/-15%.
- 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 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:

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

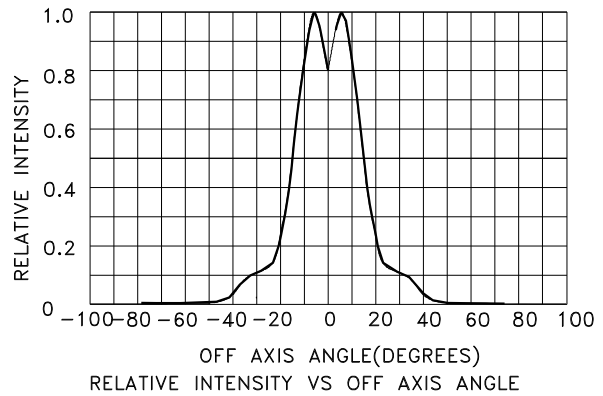
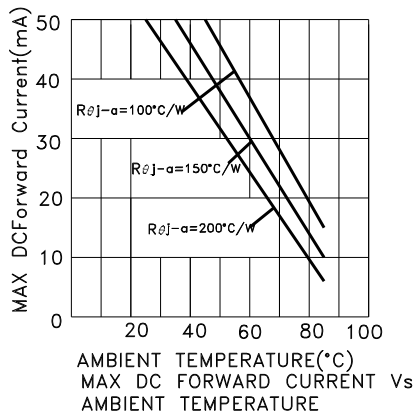
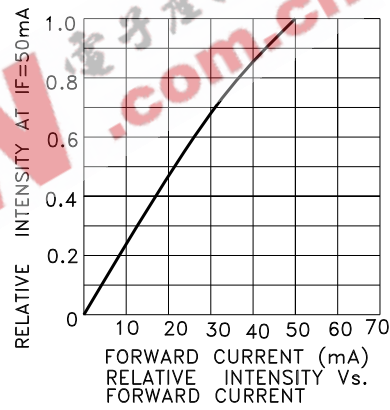
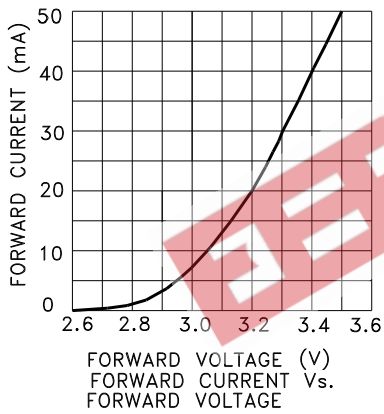
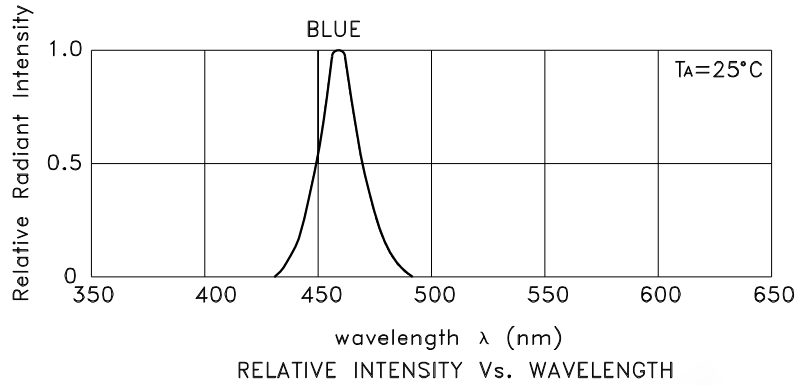
## Electrical Characteristics at TA=25°C

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

Note:

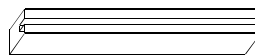
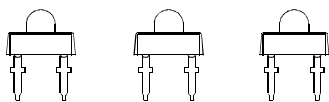
- Forward Voltage: +/-0.1V.

## Figures

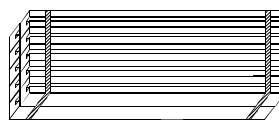


## PACKING & LABEL SPECIFICATIONS

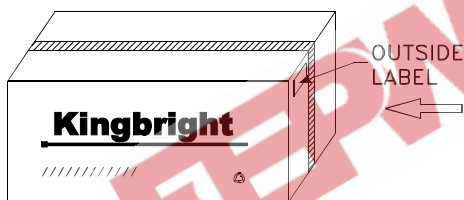
WP7678C2PBC/Z



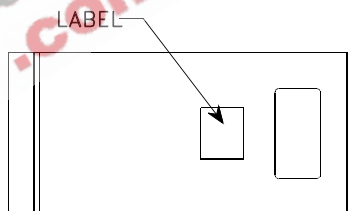
75PCS / IC TUBE(520x8.3x15mm)




750pcs / 10pcs IC TUBE



7.5K / 6# BOX



10pcs IC TUBE / Bag

<h1>Kingbright</h1>	
P/NO: WP7678C2XXX	
QTY: 750 pcs	Q.C. <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">Q C XX XX XXXX PASSED</span>
S/N: XXXX	
CODE: XXX	
LOT NO:	
 xxxxxxxxxxxxxxxxxxxxxxxxxxxx	
RoHS Compliant	