

PRELIMINARY SPEC

Part Number: WP7678C2QBC/G



## 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:

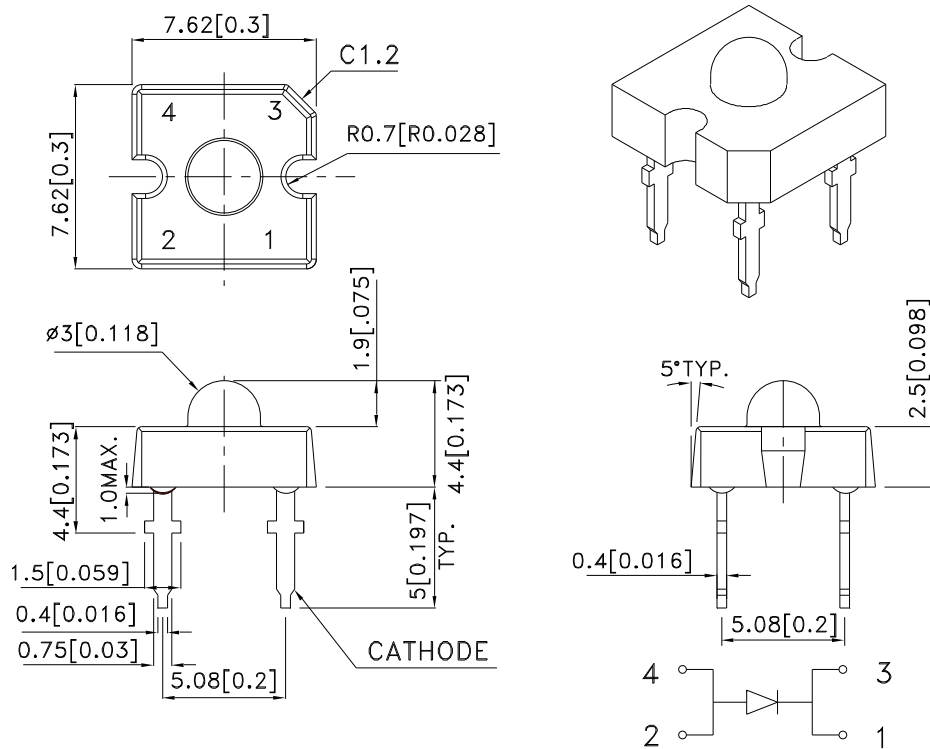
- \*Outstanding Material Efficiency.
- \*Electricity savings.
- \*Maintenance savings.
- \*Reliable and Rugged.

### 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	QB/G	UNITS
DC Forward Current	30	mA
Power dissipation	126	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] @20mA		Φv(lm)[1] @30mA	Viewing Angle[2] 2θ1/2
		Min.	Typ.	Typ.	Typ.
WP7678C2QBC/G	Blue (InGaN)	2.2	3.3	1.8	40°

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 of the optical peak value.

## Optical Characteristics at TA=25°C If=30mA 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.
QB/G	461	465	25

Note:

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

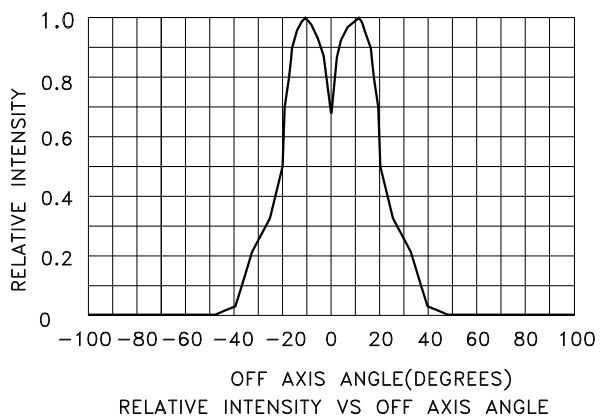
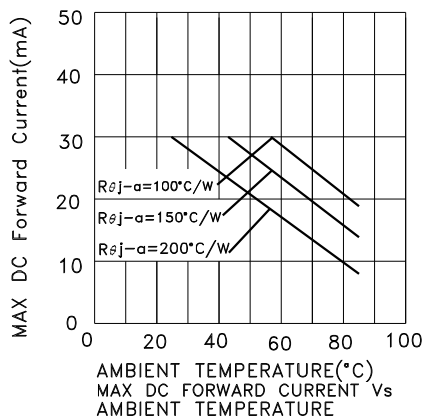
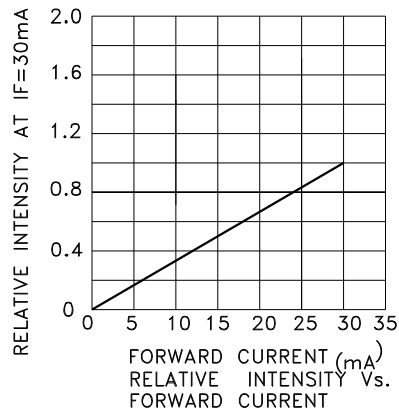
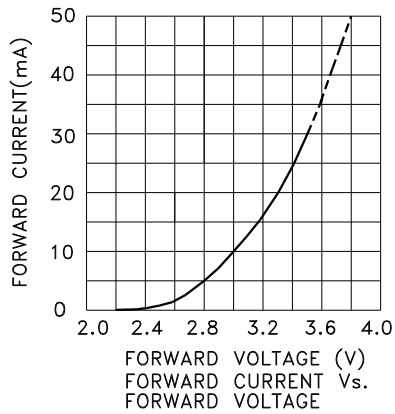
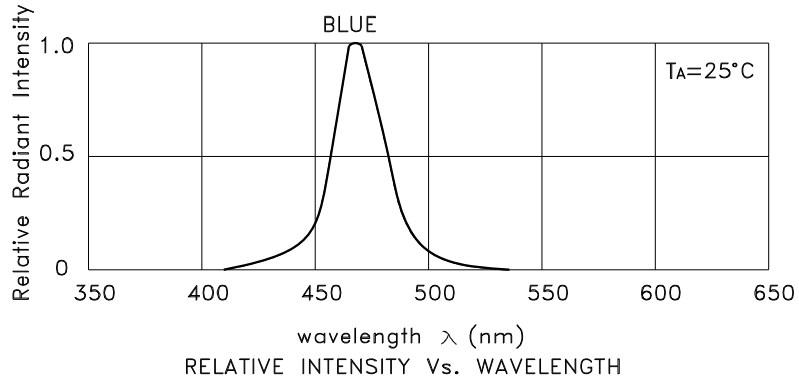
## Electrical Characteristics at TA=25°C

DEVICE TYPE	FORWARD VOLTAGE [1] VF (VOLTS) @ If=30mA		REVERSE CURRENT IR (uA) @ VR=5V	CAPACITANCE C (pF) @ VF=0V F=1MHZ	THERMAL RESISTANCE Rθj -pin °C/W
	TYP.	MAX.	MAX.	TYP.	TYP.
QB/G	3.5	4.2	10	100	180

Note:

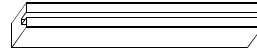
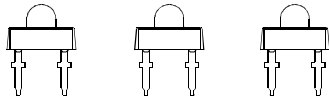
1. Forward Voltage: +/-0.1V.

## Figures

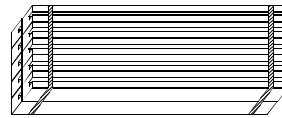


**PACKING & LABEL SPECIFICATIONS**

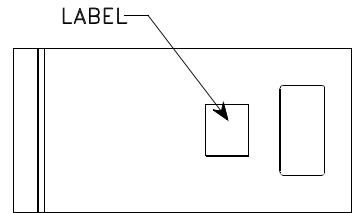
**WP7678C2QBC/G**



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



750pcs / 10pcs IC TUBE




10pcs IC TUBE / Bag



OUTSIDE LABEL



7.5K / 6# BOX

<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:	
 <small>xxxxxxxxxxxxxxxxxxxxxxxxxxxx</small>	
RoHS Compliant	