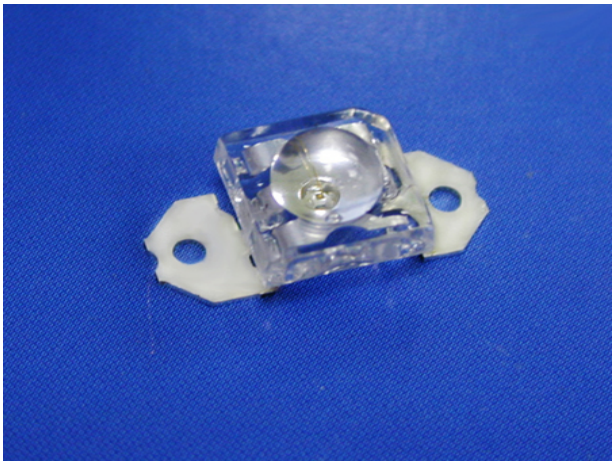
PRELIMINARY SPEC

Part Number: WP7701C4QBC/D



# 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.

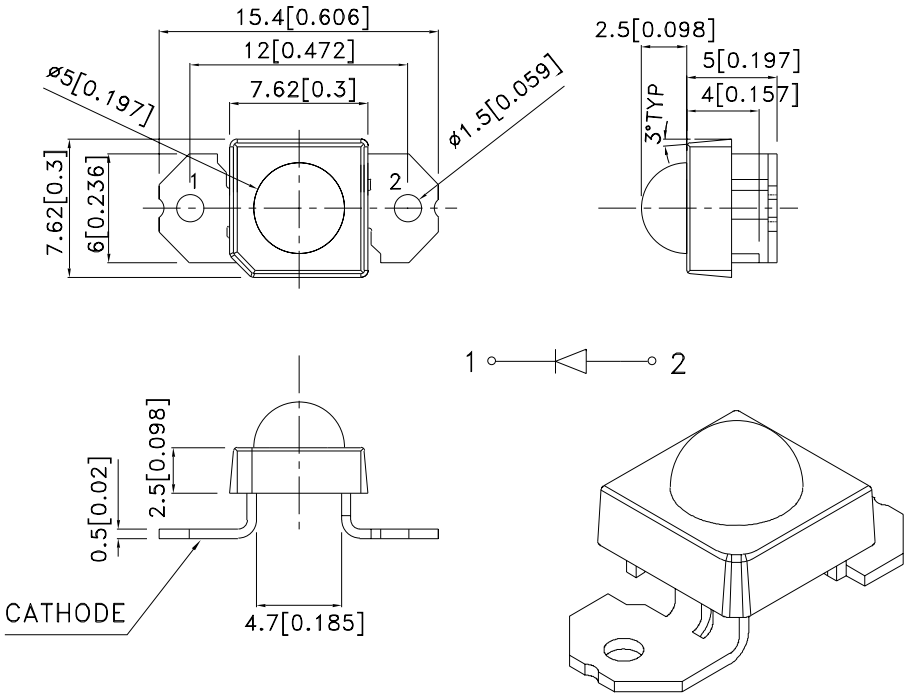
*Environmental Conformance.

**Typical Applications:**

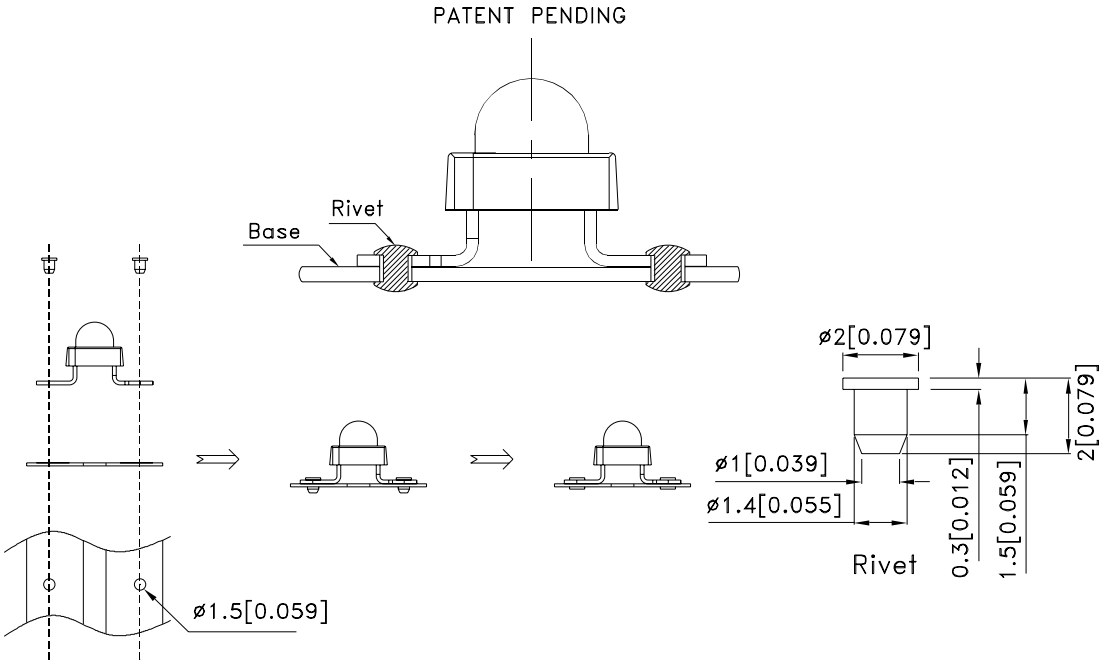
*Automotive Exterior Lighting.

*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.



## Absolute Maximum Ratings at TA=25°C

| PARAMETER | QB/D | UNITS |
|---|---|---|
| DC Forward Current | 30 | mA |
| Power dissipation | 126 | mW |
| Reverse Voltage | 5 | V |
| Operating Temperature | -40 To +85 | ℃ |
| Storage Temperature | -55 To +85 | ℃ |

## Selection Guide

| Part No. | LED COLOR | Iv(cd)[1] @30mA Min. | Typ. | Viewing Angle[2] 2θ1/2 Typ. |
|---|---|---|---|---|
| WP7701C4QBC/D | Blue (AlInGaN) | 0.48 | 1 | 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
## $I_F$=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/D | 468 | 470 | 25 |

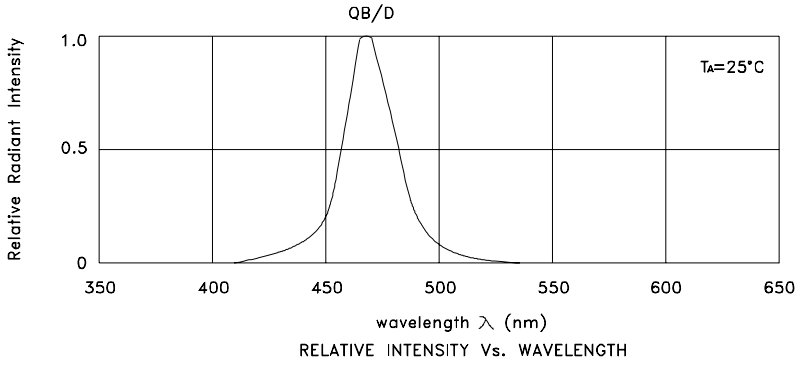
Note:
1.The dominant wavelength is derived from the CIE Chromaticity Diagram and represents the perceived color of the device; Wavelength: +/-1nm.

## Electrical Characteristics at TA=25°C

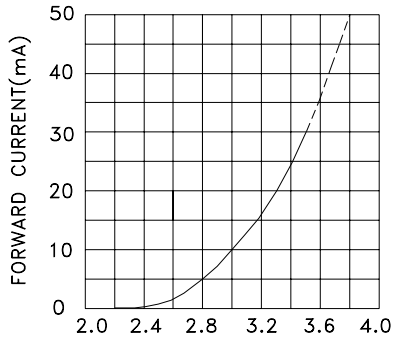
| DEVICE TYPE | FORWARD VOLTAGE [1] $V_F$ (VOLTS) @ $I_F$=30mA TYP. | MAX. | REVERSE CURRENT $I_R$ (uA) @ $V_R$=5V MAX. | CAPACITANCE C (pF) @ $V_F$=0V F=1MHZ TYP. | THERMAL RESISTANCE Rθj -pin °C/W TYP. |
|---|---|---|---|---|---|
| QB/D | 3.5 | 4.2 | 10 | 100 | 180 |

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

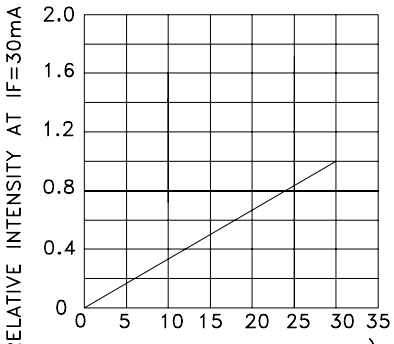
## Figures



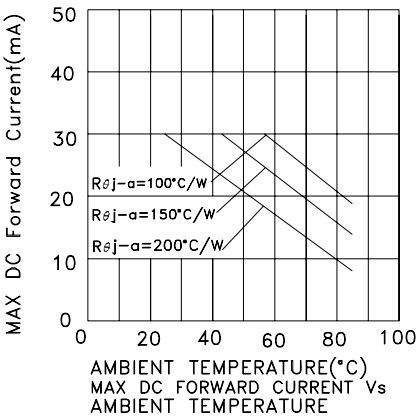
RELATIVE INTENSITY Vs. WAVELENGTH



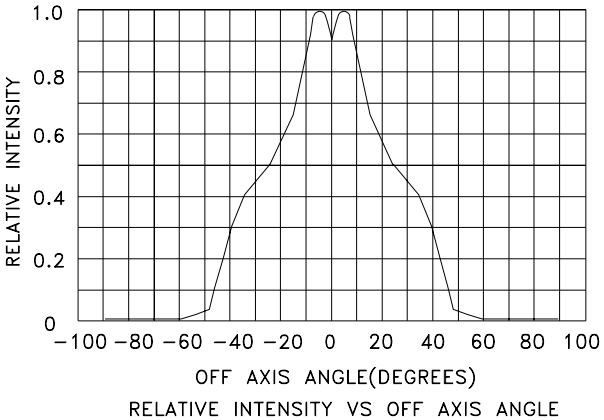
FORWARD CURRENT Vs.
FORWARD VOLTAGE



RELATIVE INTENSITY Vs.
FORWARD CURRENT



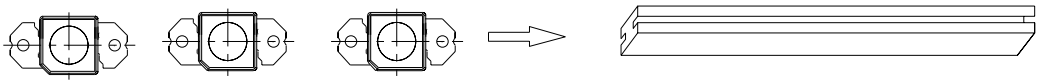
MAX DC FORWARD CURRENT Vs
AMBIENT TEMPERATURE



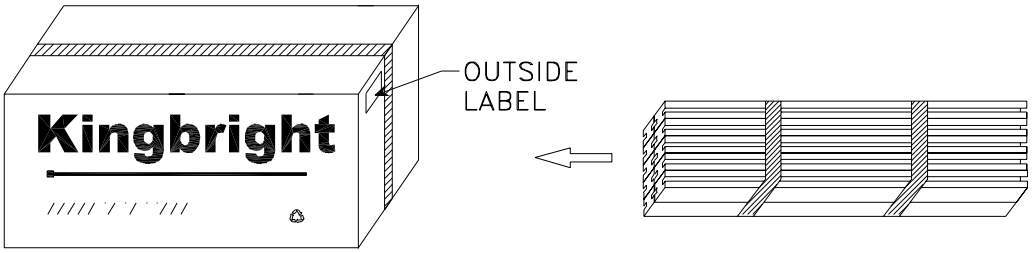
RELATIVE INTENSITY VS OFF AXIS ANGLE

Kingbright

**PACKING & LABEL SPECIFICATIONS** **WP7701C4QBC/D**



65PCS / IC TUBE




20.8 K / 6# BOX

650pcs / 10pcs IC TUBE

