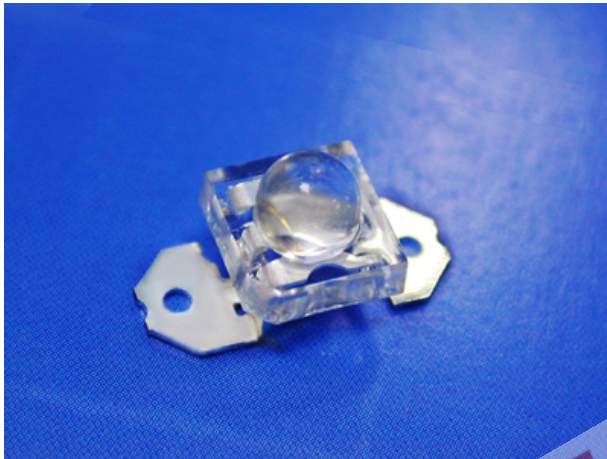


PRELIMINARY SPEC

Part Number: WP7700C4QBC/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.
- *PACKAGE IN TUBES FOR USE WITH AUTOMATIC INSERTION EQUIPMENT.
- *RoHS COMPLIANT.

Benefits:

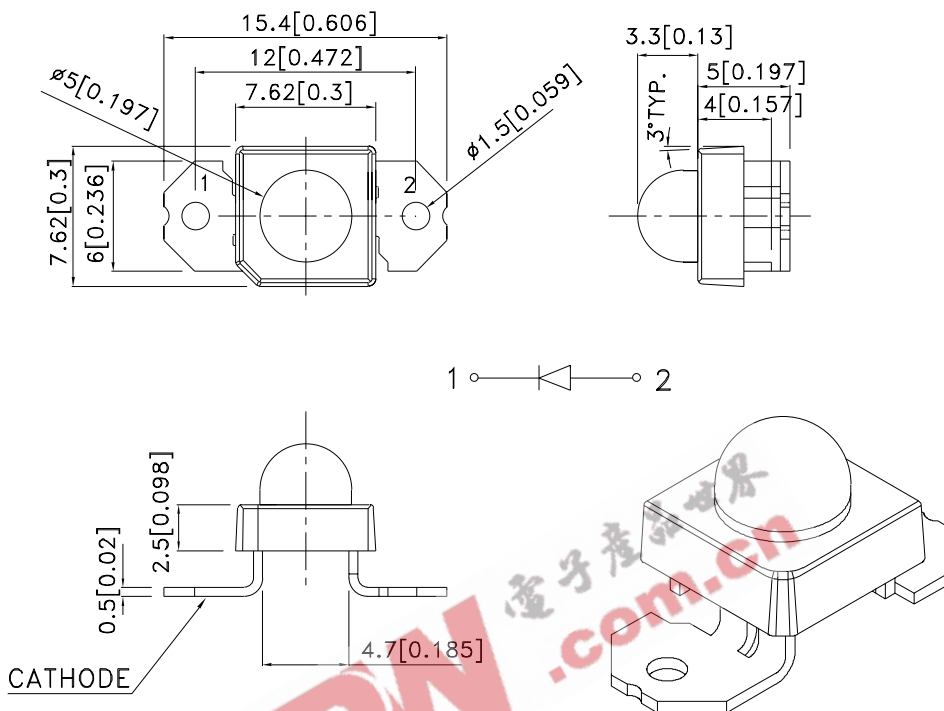
- *Rugged Lighting Products.
- *Electricity savings.
- *Maintenance savings.
- *Environmental Conformance.

Typical Applications:

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

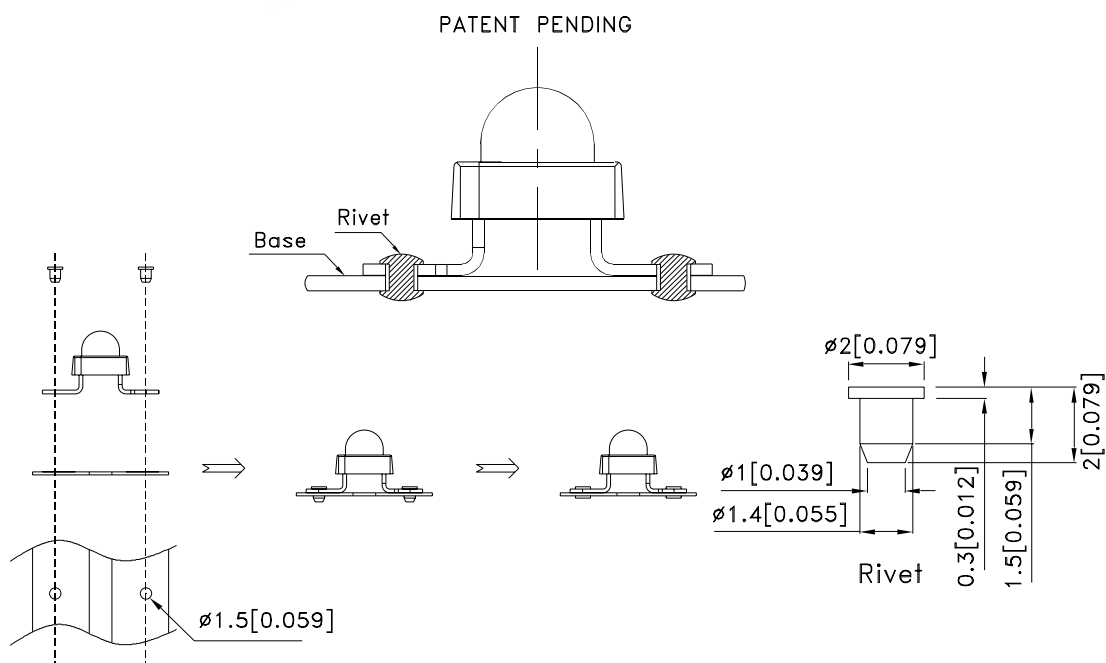


Outline Drawings



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01)$ 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 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 | °C |
| Storage Temperature | -55 To +85 | °C |

Selection Guide

| Part No. | LED COLOR | Iv(cd)[1] @30mA | | Viewing Angle[2] |
|---------------|----------------|--------------------|------|------------------|
| | | Min. | Typ. | 2θ1/2 Typ. |
| WP7700C4QBC/D | Blue (AlInGaN) | 1.5 | 2.2 | 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=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:

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

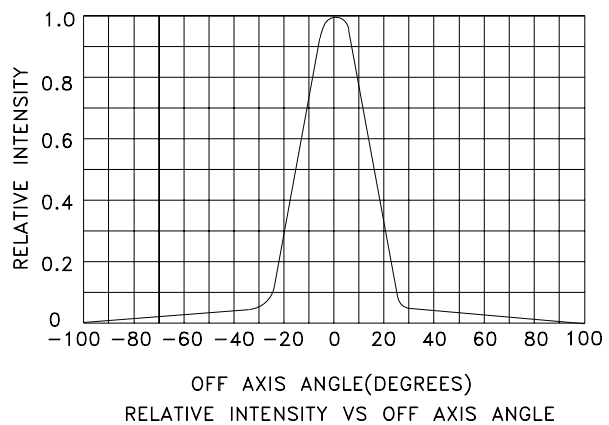
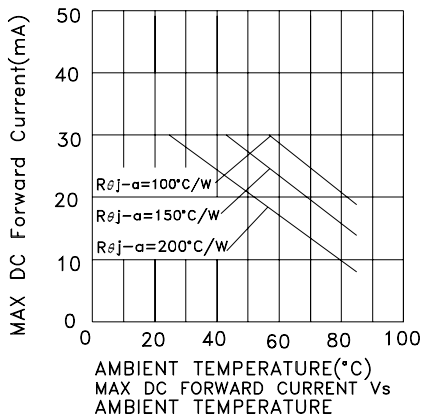
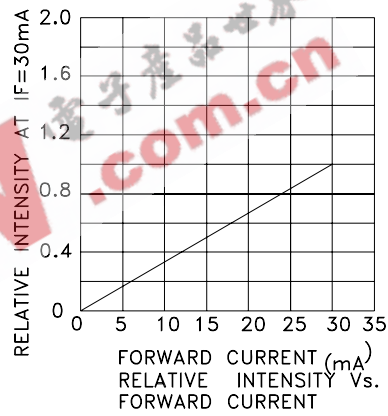
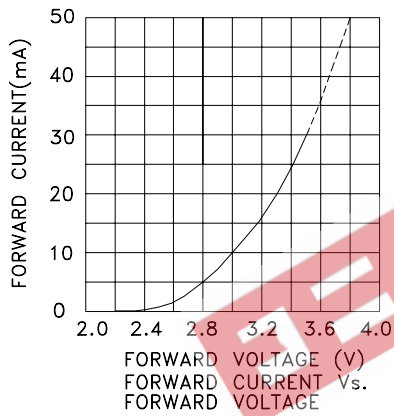
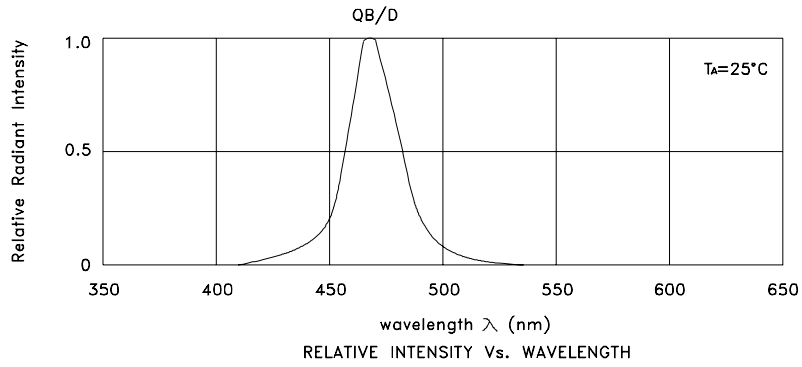
Electrical Characteristics at TA=25°C

| 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/D | 3.5 | 4.2 | 10 | 100 | 180 |

Note:

- Forward Voltage: +/-0.1V.

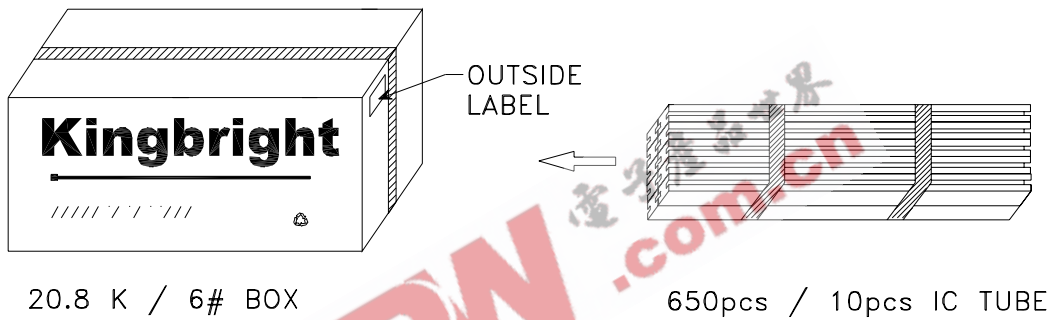
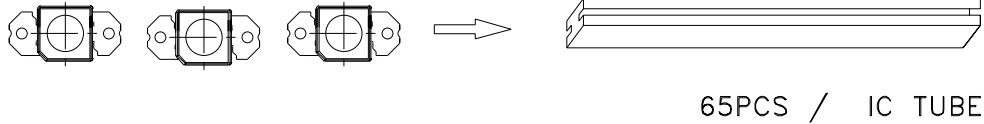
Figures




Kingbright

PACKING & LABEL SPECIFICATIONS

WP7700C4QBC/D



| | | | | |
|---|--|----|--------------|--------|
| Kingbright | | | | |
| Q.C. | <table border="1"> <tr> <td>QC</td> </tr> <tr> <td>xxx xx. xxxx</td> </tr> <tr> <td>PASSED</td> </tr> </table> | QC | xxx xx. xxxx | PASSED |
| QC | | | | |
| xxx xx. xxxx | | | | |
| PASSED | | | | |
| TYPE NO : WP7700C4XXX | | | | |
| QUANTITY : 650 pcs | | | | |
| S/N : XXX | CODE: XXXX | | | |
| LOT NO:  | | | | |
| MADE IN CHINA | RoHS Compliant | | | |