

PRELIMINARY SPEC

Part Number: WP7679C1QBC/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.
- * Uniform Color.
- * Low Power Consumption.
- * Low Thermal Resistance.
- * Low Profile.
- * Packaged in tubes for use with automatic insertion equipment.
- * RoHS Compliant.

Benefits:

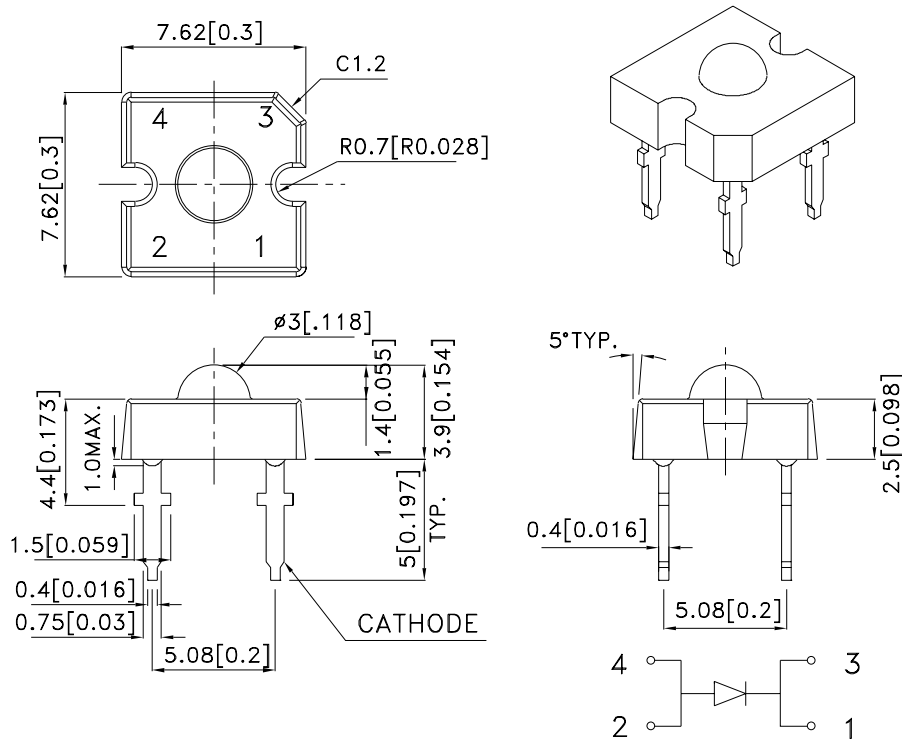
- *Outstanding Material Efficiency.
- *Electricity savings.
- *Maintenance savings.
- *Reliable and Rugged.

Typical Applications:

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



Outline Drawings



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01)$ 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/D | UNITS |
|----------------------------|------------------------------------|------------------|
| DC Forward Current | 30 | mA |
| Power dissipation | 126 | mW |
| Reverse Voltage | 5 | V |
| Operating Temperature | -40 To +85 | $^\circ\text{C}$ |
| Storage Temperature | -40 To +85 | $^\circ\text{C}$ |
| Lead Solder Temperature[1] | 260 $^\circ\text{C}$ For 5 Seconds | |

1. 1.5mm[0.06inch]below seating plane.

Selection Guide

| Part No. | LED COLOR | Iv(cd)[1] @30mA | | Viewing Angle[2] |
|---------------|----------------|--------------------|------|------------------|
| | | Min. | Typ. | 2θ1/2 Typ. |
| WP7679C1QBC/D | Blue (AlInGaN) | 0.38 | 0.9 | 70° |

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.

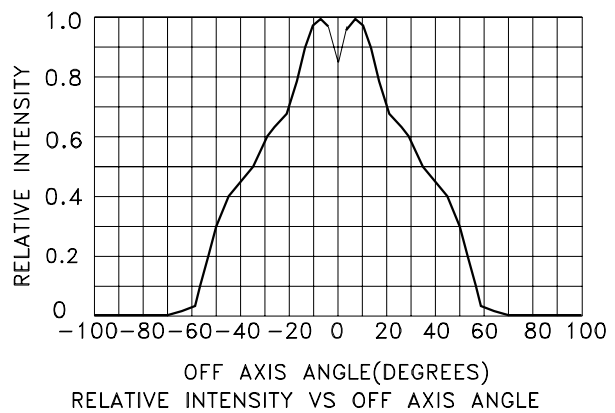
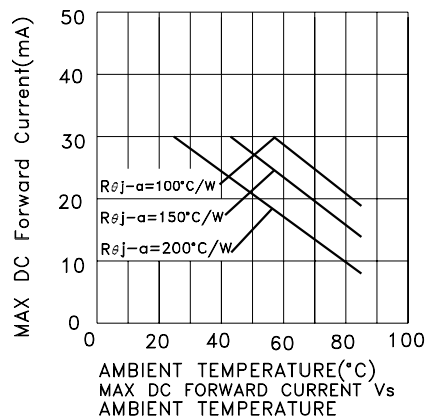
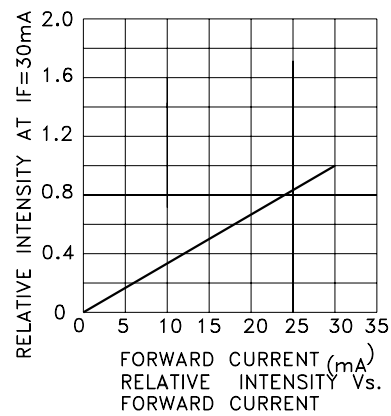
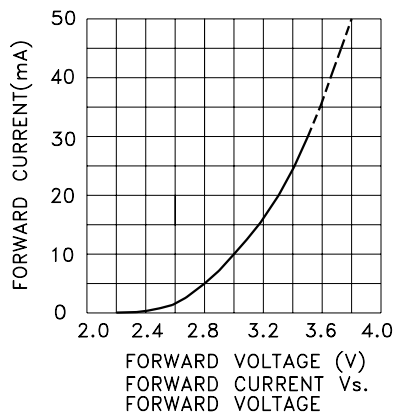
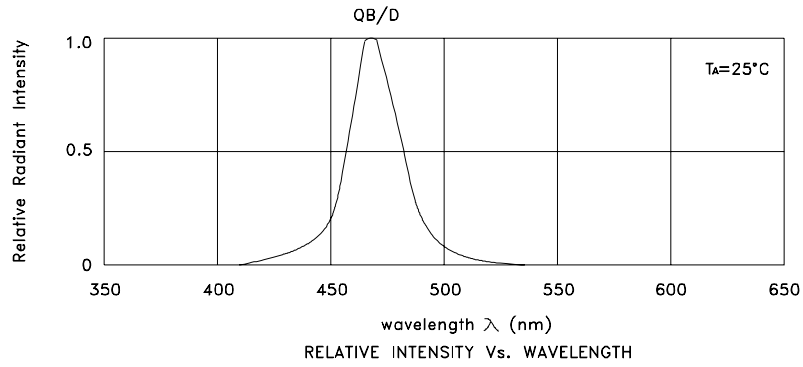
Electrical Characteristics at TA=25°C

| 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:

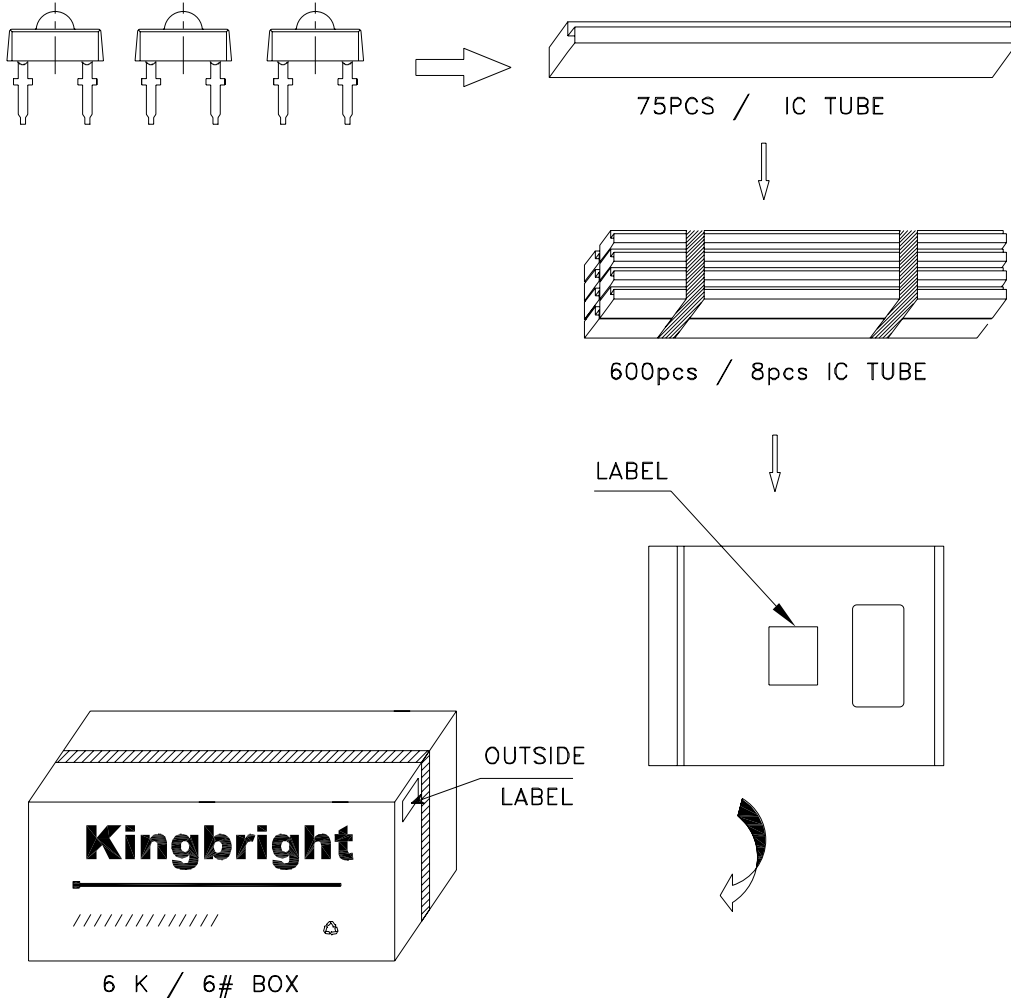
- Forward Voltage: +/-0.1V.


Figures



PACKING & LABEL SPECIFICATIONS

WP7679C1QBC/D



| | | | | |
|---|--|----|----------|--------|
| Kingbright | | | | |
| Q.C. | <table border="1"> <tr> <td style="text-align: center;">QC</td> </tr> <tr> <td style="text-align: center;">XX XX XX</td> </tr> <tr> <td style="text-align: center;">PASSED</td> </tr> </table> | QC | XX XX XX | PASSED |
| QC | | | | |
| XX XX XX | | | | |
| PASSED | | | | |
| TYPE NO : WP7679C1xxx | | | | |
| QUANTITY : 600 pcs | | | | |
| S/N : XX | CODE: XX | | | |
| LOT NO :  <small>XXXXXXXXXXXX</small> | | | | |
| MADE IN CHINA | RoHS Compliant | | | |