### SnapLED

#### PRELIMINARY SPEC

#### Part Number: WP7701C4PBC/Z



#### 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.

### **Technical Data**



#### ATTENTION OBSERVE PRECAUTIONS

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.

#### Benefits:

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

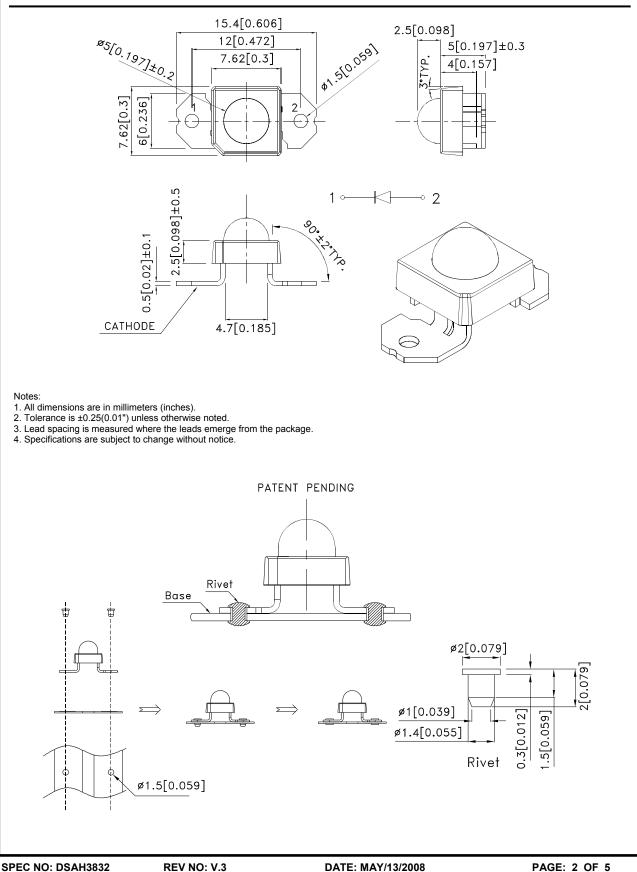
### **Typical Applications:**

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



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| Absolute Maximum Ratings at TA=25°C |            |       |  |
|-------------------------------------|------------|-------|--|
| PARAMETER                           | PB/Z       | UNITS |  |
| DC Forward Current                  | 50         | mA    |  |
| Power dissipation                   | 210        | mW    |  |
| Reverse Voltage                     | 5          | V     |  |
| Operating Temperature               | -40 To +85 | °C    |  |
| Storage Temperature                 | -55 To +85 | °C    |  |

#### **Selection Guide**

| Part No.      | LED COLOR    |      | :d) <sup>[1]</sup><br>DmA | Фv(lm) <sup>[1]</sup><br>@50mA | Viewing Angle <sup>[2]</sup><br>201/2<br>Typ. |
|---------------|--------------|------|---------------------------|--------------------------------|---|
|               |              | Min. | Тур.                      | Тур.                           | 50°   |
| WP7701C4PBC/Z | Blue (InGaN) | 1.8  | 3.5                       | 3.4                            | 50  |

Notes: 1.Luminous intensity is measured with an integrating sphere after the device has stabilized; Luminous Intensity / luminous flux: +/-15%. 2.01/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

#### **Optical Characteristics at TA=25°C** l⊧=50mA Rθj-a=200°C/W

| DEVICE<br>TYPE | PEAK<br>WAVELENGTH<br>λΡΕΑΚ (nm)<br>TYP. | DOMINANT[1]<br>WAVELENGTH<br>λDOM (nm)<br>TYP. | SPECTRAL LINE<br>WAVELENGTH<br>Δλ1/2(nm)<br>TYP. |
|----------------|--|--|--|
| PB/Z           | 458                                      | 465  | 22   |

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

1. Forward Voltage: +/-0.1V.

Figures

