

PRELIMINARY SPEC

Part Number: WP7524PBC/Z

BLUE



**ATTENTION**  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
DISCHARGE  
SENSITIVE  
DEVICES

### Features

- LOW POWER CONSUMPTION.
- POPULAR T-1 3/4 DIAMETER PACKAGE.
- GENERAL PURPOSE LEADS.
- RELIABLE AND RUGGED.
- LONG LIFE - SOLID STATE RELIABILITY.
- RoHS COMPLIANT.

### Description

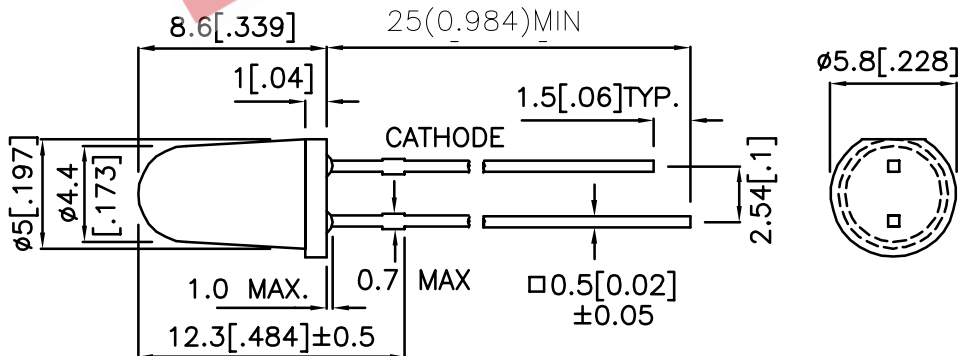
The Blue source color devices are made with InGaN Light Emitting Diode.

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.

### Package Dimensions



#### 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.



## Selection Guide

| Part No.    | Dice         | Lens Type   | Iv (mcd) [2]<br>@ 20mA |      | Viewing<br>Angle [1] |
|-------------|--------------|-------------|------------------------|------|----------------------|
|             |              |             | Min.                   | Typ. | 2θ1/2                |
| WP7524PBC/Z | BLUE (InGaN) | WATER CLEAR | 2200                   | 4500 | 10°                  |

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. Luminous Intensity/ Luminous Flux: +/-15%.

## Electrical / Optical Characteristics at TA=25°C

| Symbol             | Parameter                | Device | Typ. | Max. | Units | Test Conditions           |
|--------------------|--------------------------|--------|------|------|-------|---------------------------|
| λ <sub>peak</sub>  | Peak Wavelength          | Blue   | 458  |      | nm    | I <sub>F</sub> =20mA      |
| λ <sub>D</sub> [1] | Dominant Wavelength      | Blue   | 465  |      | nm    | I <sub>F</sub> =20mA      |
| Δλ <sub>1/2</sub>  | Spectral Line Half-width | Blue   | 22   |      | nm    | I <sub>F</sub> =20mA      |
| C                  | Capacitance              | Blue   | 110  |      | pF    | V <sub>F</sub> =0V;f=1MHz |
| V <sub>F</sub> [2] | Forward Voltage          | Blue   | 3.2  | 3.7  | V     | I <sub>F</sub> =20mA      |
| I <sub>R</sub>     | Reverse Current          | Blue   |      | 10   | uA    | V <sub>R</sub> = 5V       |

Notes:

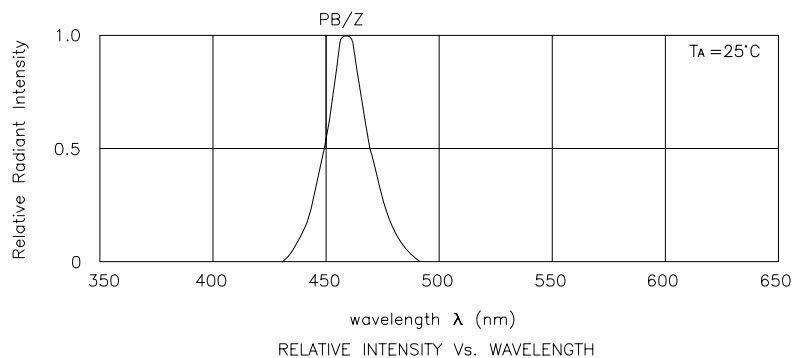
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

## Absolute Maximum Ratings at TA=25°C

| Parameter                       | Blue                | Units |
|---------------------------------|---------------------|-------|
| Power dissipation               | 111                 | mW    |
| DC Forward Current              | 30                  | mA    |
| Peak Forward Current [1]        | 100                 | mA    |
| Reverse Voltage                 | 5                   | V     |
| Operating / Storage Temperature | -40°C To +85°C      |       |
| Lead Solder Temperature [2]     | 260°C For 3 Seconds |       |
| Lead Solder Temperature [3]     | 260°C For 5 Seconds |       |

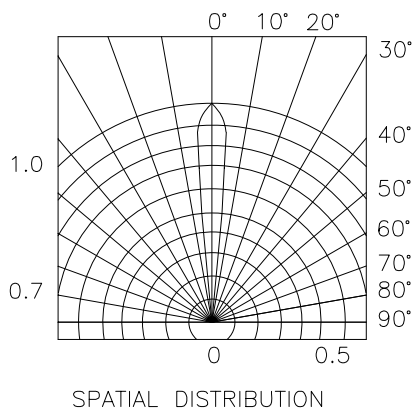
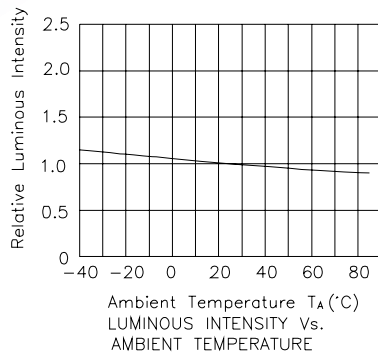
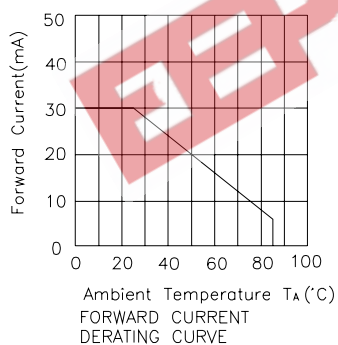
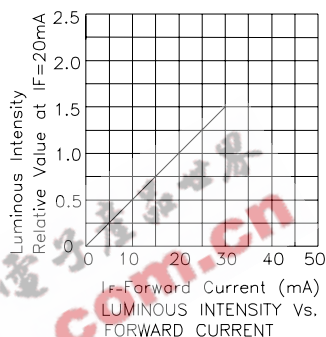
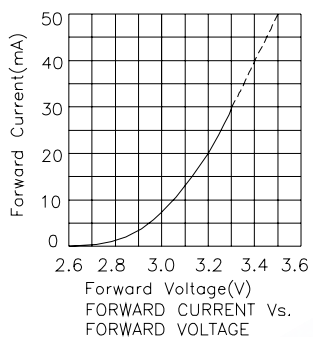
Notes:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 2mm below package base.
3. 5mm below package base.



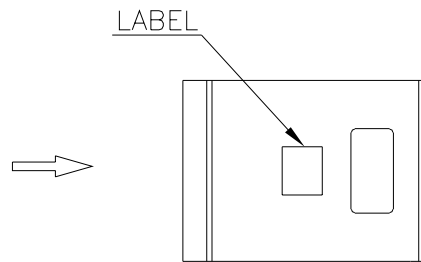
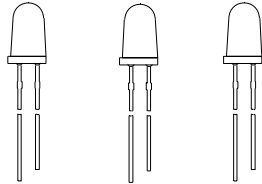
Blue

WP7524PBC/Z



## PACKING & LABEL SPECIFICATIONS

WP7524PBC/Z



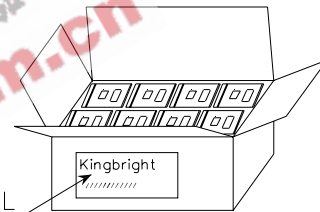
500PCS / BAG




20K / 9# BOX

OUTSIDE LABEL

OUTSIDE LABEL



10K / 5# BOX

|                   |                                                                                                                                                                                                |    |          |        |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----------|--------|
| <b>Kingbright</b> |                                                                                                                                                                                                |    |          |        |
| 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 :         | WP7524XXX                                                                                                                                                                                      |    |          |        |
| QUANTITY :        | 500 pcs                                                                                                                                                                                        |    |          |        |
| S/N :             | XXX                                                                                                                                                                                            |    |          |        |
|                   | CODE: XX                                                                                                                                                                                       |    |          |        |
| LOT NO            | <br>xxxxxxxxxxxx                                                                                            |    |          |        |
| RoHS Compliant    |                                                                                                                                                                                                |    |          |        |