

PRELIMINARY SPEC

Part Number: WP7113PR51C/A

CYAN



**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.
- AVAILABLE ON TAPE AND REEL.
- RoHS COMPLIANT.

### Description

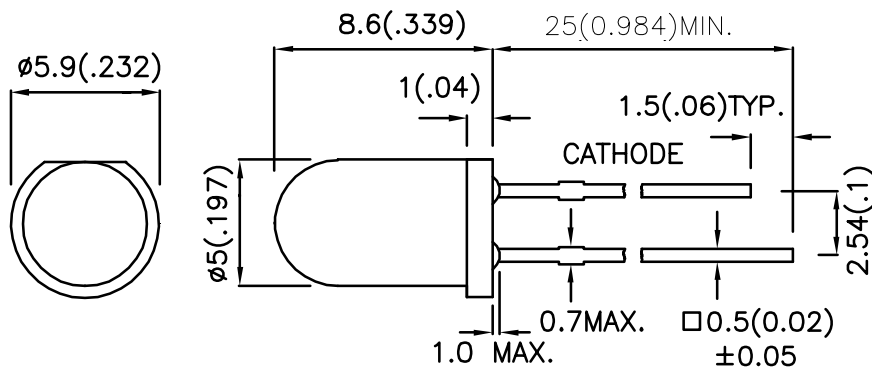
The source color devices are made with InGaN on SiC Light Emitting Diode.

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                |
| WP7113PR51C/A | CYAN (InGaN) | WATER CLEAR | 900                    | 2200 | 20°                  |

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           |
|--------------------|--------------------------|--------|------|------|-------|---------------------------|
| V <sub>F</sub> [1] | Forward Voltage          | Cyan   | 3.3  | 3.8  | V     | I <sub>F</sub> =20mA      |
| I <sub>R</sub>     | Reverse Current          | Cyan   |      | 10   | uA    | V <sub>R</sub> = 5V       |
| X [2]              | Chromaticity Coordinates | Cyan   | 0.18 |      |       | I <sub>F</sub> =20mA      |
| Y [2]              |                          |        | 0.39 |      |       |                           |
| C                  | Capacitance              | Cyan   | 100  |      | pF    | V <sub>F</sub> =0V;f=1MHz |

Notes:

1. Forward Voltage: +/-0.1V.
2. Chromaticity Coordinates X, Y: +/-0.03.

## Absolute Maximum Ratings at TA=25°C

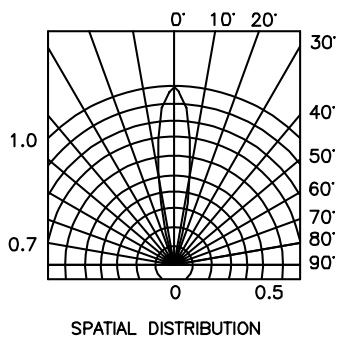
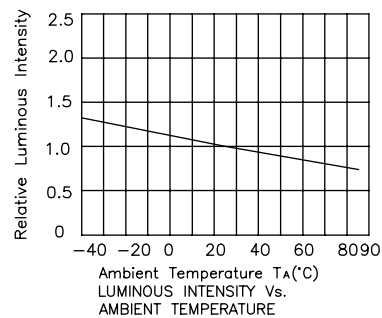
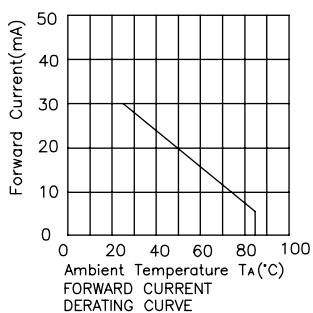
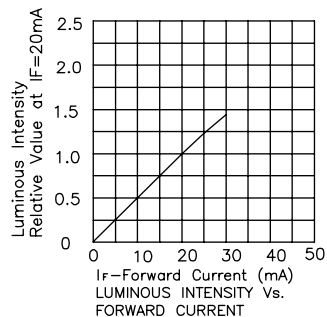
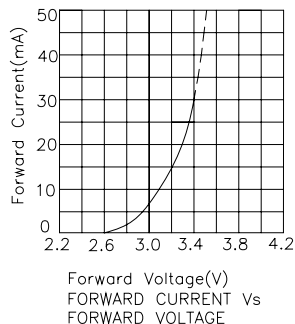
| Parameter                     | Cyan                | Units |
|-------------------------------|---------------------|-------|
| Power dissipation             | 114                 | mW    |
| DC Forward Current            | 30                  | mA    |
| Reverse Voltage               | 5                   | V     |
| Operating/Storage Temperature | -40°C To +85°C      |       |
| Lead Solder Temperature [1]   | 260°C For 3 Seconds |       |
| Lead Solder Temperature [2]   | 260°C For 5 Seconds |       |

Notes:

1. 2mm below package base.
2. 5mm below package base.

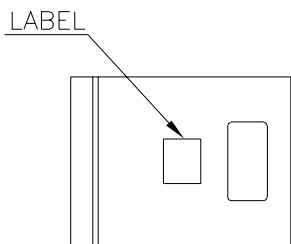
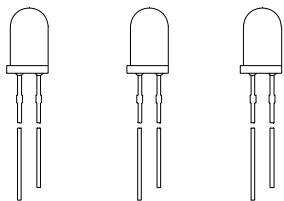
Cyan

WP7113PR51C/A



## PACKING & LABEL SPECIFICATIONS

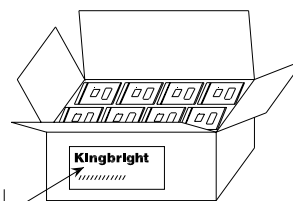
WP7113PR51C/A



500PCS / BAG




OUTSIDE LABEL



OUTSIDE LABEL

20K / 9# BOX

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;">xxx xx. xxxx</td> </tr> <tr> <td style="text-align: center;">PASSED</td> </tr> </table> | QC | xxx xx. xxxx | PASSED |
| QC                |  |    |              |        |
| xxx xx. xxxx      |  |    |              |        |
| PASSED            |  |    |              |        |
| TYPE NO :         | WP7113XXX  |    |              |        |
| QUANTITY :        | 500 pcs  |    |              |        |
| S/N :             | XXX  |    |              |        |
|                   | CODE: XX   |    |              |        |
| LOT NO :          | <br>xxxxxxxxxxxx  |    |              |        |
|                   | RoHS Compliant   |    |              |        |