PRELIMINARY SPEC

### T-1 3/4 (5mm) SOLID STATE LAMP

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

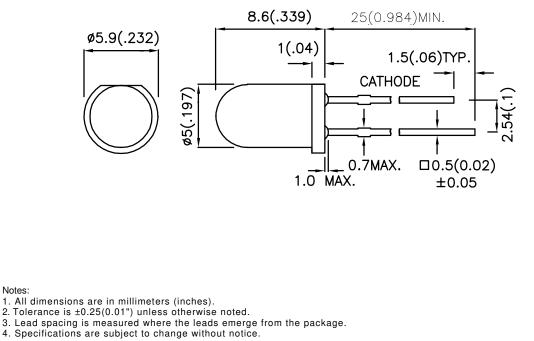
The source color devices are made with InGaN on SiC Light Emitting Diode.

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:

**REV NO: V.4 CHECKED: Allen Liu**  DATE: AUG/07/2006 DRAWN: W.J.ZHU

PAGE: 1 OF 4 ERP:1101019001

#### **Selection Guide**

| Part No.      | Dice         | Lens Type   | lv (mcd) [2]<br>@ 20mA |      | Viewing<br>Angle [1] |
|---------------|--------------|-------------|------------------------|------|----------------------|
|               |              |             | Min.                   | Тур. | 201/2                |
| 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 | Тур. | Max. | Units | Test Conditions |
|--------|---------------------------|--------|------|------|-------|-----------------|
| VF[1]  | Forward Voltage           | Cyan   | 3.3  | 3.8  | V     | IF=20mA         |
| IR     | Reverse Current           | Cyan   |      | 10   | uA    | VR = 5V         |
| X [2]  | Obvorratioity Coordinates | Cyan   | 0.18 |      |       | - IF=20mA       |
| Y [2]  | Chromaticity Coordinates  |        | 0.39 |      |       |                 |
| С      | Capacitance               | Cyan   | 100  |      | pF    | VF=0V;f=1MHz    |

Notes:

Forward Voltage: +/-0.1V.
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.

