

PRELIMINARY SPEC

Part Number: WP7104PR51C/A

CYAN



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

### Features

- LOW POWER CONSUMPTION.
- POPULAR T-1 DIAMETER PACKAGE.
- GENERAL PURPOSE LEADS
- RELIABLE AND RUGGED.
- LONG LIFE - SOLID STATE RELIABILITY.
- AVAILABLE ON TAPE AND REEL.
- RoHS COMPLIANT.

### Description

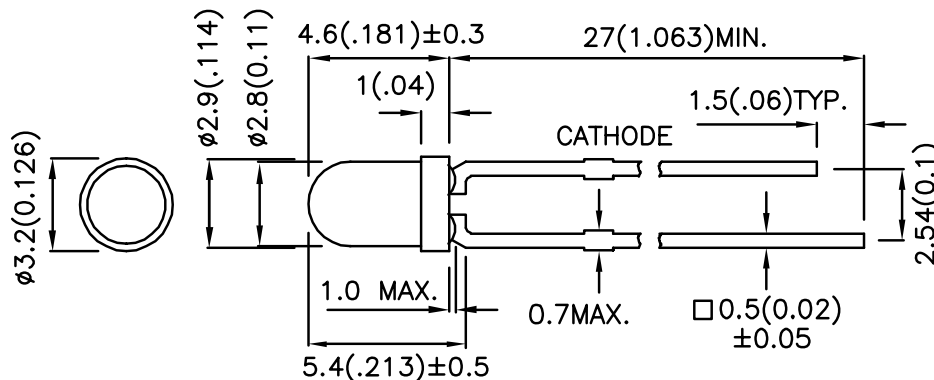
The source color devices are made with InGaN on SiC Light Emitting Diode.

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] @ 20mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
WP7104PR51C/A	CYAN (InGaN)	WATER CLEAR	480	1600	34°

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

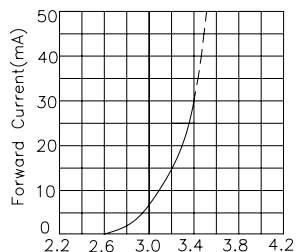
Parameter	Cyan	Units
Power dissipation	114	mW
DC Forward Current	30	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [1]	260°C For 3 Seconds	
Lead Solder Temperature [2]	260°C For 5 Seconds	

Notes:

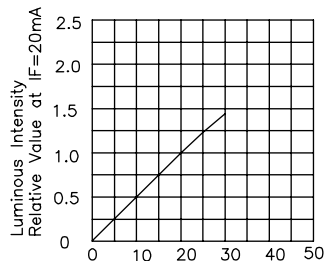
1. 2mm below package base.
2. 5mm below package base.

Cyan

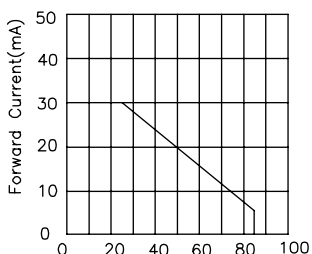
WP7104PR51C/A



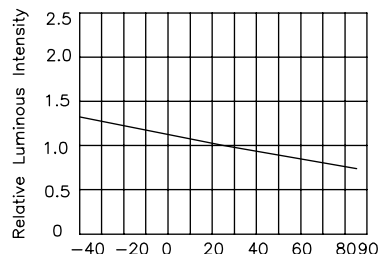
Forward Voltage(V)  
FORWARD CURRENT Vs  
FORWARD VOLTAGE



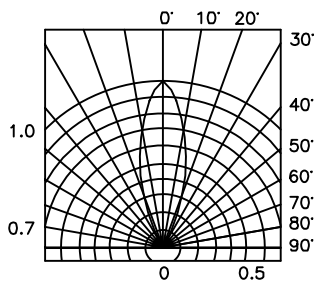
$I_f$ -Forward Current (mA)  
LUMINOUS INTENSITY Vs.  
FORWARD CURRENT



Ambient Temperature  $T_A$ (°C)  
FORWARD CURRENT  
DERATING CURVE



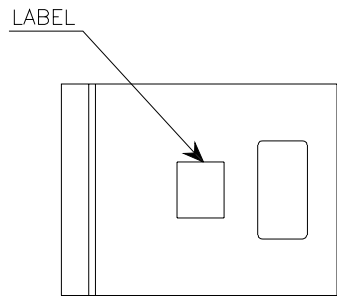
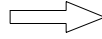
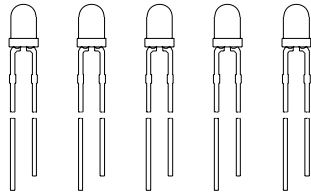
Ambient Temperature  $T_A$ (°C)  
LUMINOUS INTENSITY Vs.  
AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

## PACKING & LABEL SPECIFICATIONS

## WP7104PR51C/A

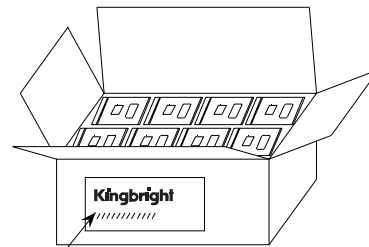
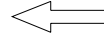


500PCS/BAG



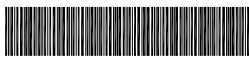
20K / 9# BOX

OUTSIDE LABEL



10K / 5# BOX

OUTSIDE LABEL

<h1>Kingbright</h1>				
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 :	WP7104XXX			
QUANTITY :	500 pcs			
S/N :	xxx			
	CODE: XX			
LOT NO :	 xxxxxxxxxxxx			
RoHS Compliant				