

Kingbright

T-1 (3mm) SOLID STATE LAMP



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

WP7104PBC

BLUE

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

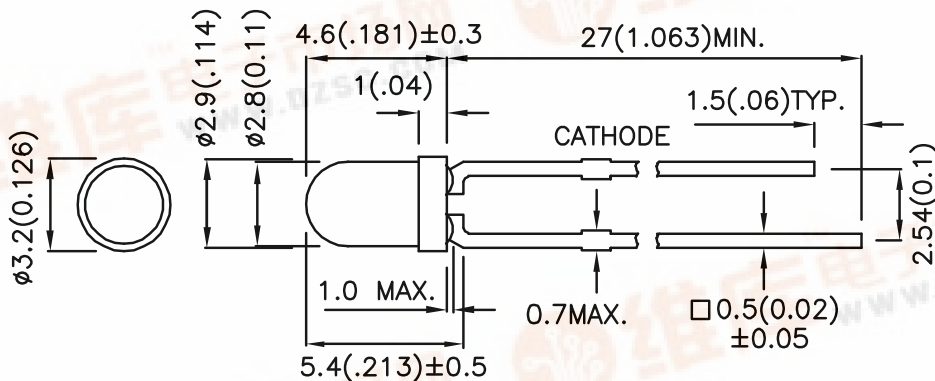
The Blue source color devices are made with InGaN on SiC Light Emitting Diode.

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) @ 20mA		Viewing Angle
			Min.	Typ.	2 θ 1/2
WP7104PBC	BLUE (InGaN)	WATER CLEAR	180	450	20°

Note:

1. θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Blue	468		nm	I _F =20mA
λ_D	Dominant Wavelength	Blue	470		nm	I _F =20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Blue	25		nm	I _F =20mA
C	Capacitance	Blue	65		pF	V _F =0V;f=1MHz
V _F	Forward Voltage	Blue	3.65	4.2	V	I _F =20mA
I _R	Reverse Current	Blue		10	uA	V _R = 5V

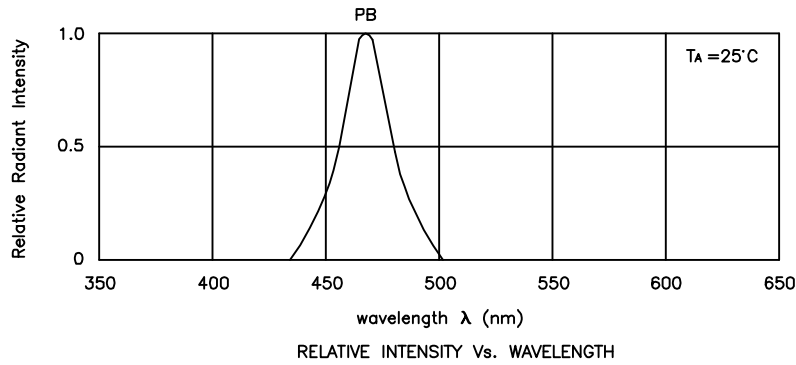
Absolute Maximum Ratings at T_A=25°C

Parameter	Blue	Units
Power dissipation	102	mW
DC Forward Current	30	mA
Peak Forward Current [1]	160	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:

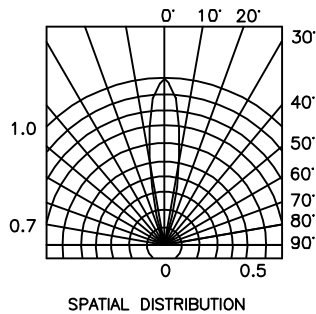
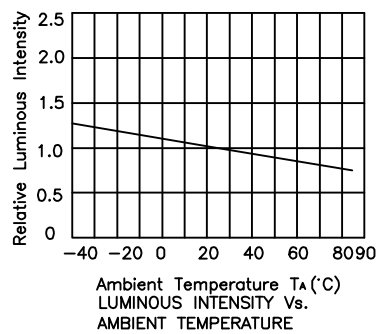
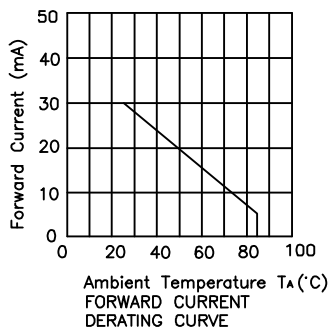
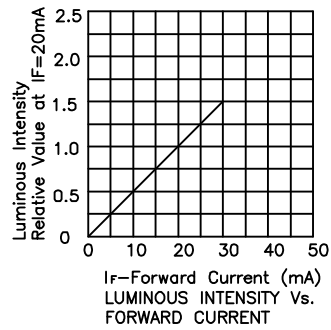
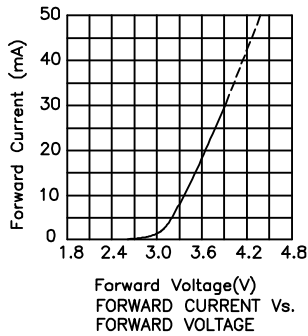
- 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2mm below package base.
- 5mm below package base.

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Blue

WP7104PBC



Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength), the typical accuracy of the sorting process is as follows:

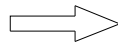
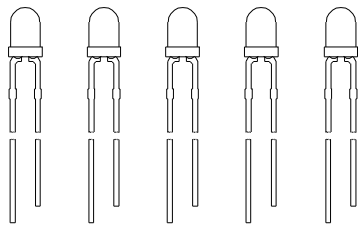
1. Wavelength: +/-1nm
2. Luminous Intensity: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

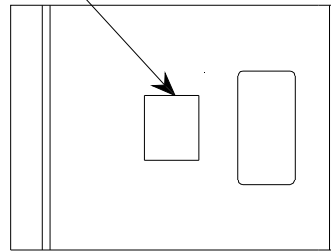
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PACKING & LABEL SPECIFICATIONS

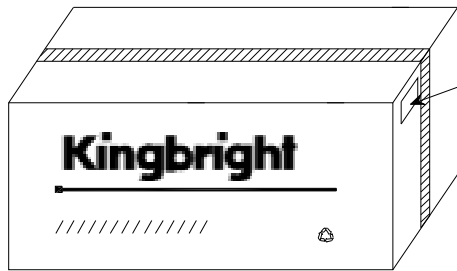
WP7104PBC



LABEL

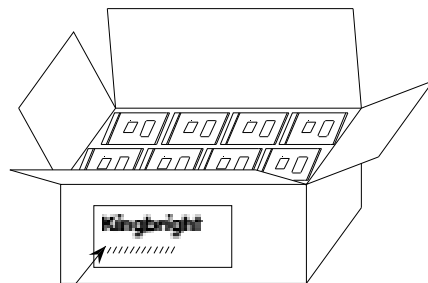
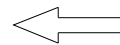


500PCS/BAG




20K / 9# BOX

OUTSIDE LABEL



10K / 5# BOX

OUTSIDE LABEL

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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
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xxx-xx-xxxx				
PASSED				
TYPE NO : WP7104XXX				
QUANTITY : 500 pcs				
S/N : xxx	CODE: xx			
LOT NO : 				
RoHS Compliant				