

T-1 (3mm) SOLID STATE LAMP

Part Number: WP7104PBC/A



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

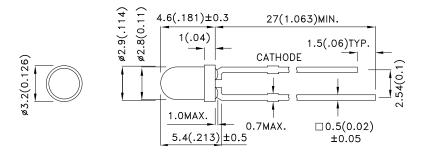
Static electricity and surge damage the LEDS.

It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.

Blue

All devices, equipment and machinery must be electrically grounded.

Package Dimensions



- 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.





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Selection Guide

| Part No. | Dice | Lens Type | lv (mcd) [2] @ 20mA | | Viewing Angle [1] |
|-------------|--------------|-------------|------------------------|------|----------------------|
| | | | Min. | Тур. | 201/2 |
| WP7104PBC/A | Blue (InGaN) | WATER CLEAR | 280 | 1000 | 20° |

- 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 |
|--------|--------------------------|--------|------|------|-------|---------------------|
| λpeak | Peak Wavelength | Blue | 468 | | nm | IF=20mA |
| λD [1] | Dominant Wavelength | Blue | 470 | | nm | I=20mA |
| Δλ1/2 | Spectral Line Half-width | Blue | 21 | | nm | IF=20mA |
| С | Capacitance | Blue | 100 | | pF | VF=0V;f=1MHz |
| VF [2] | Forward Voltage | Blue | 3.2 | 4 | V | IF=20mA |
| lR | Reverse Current | Blue | | 10 | uA | V _R = 5V |

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

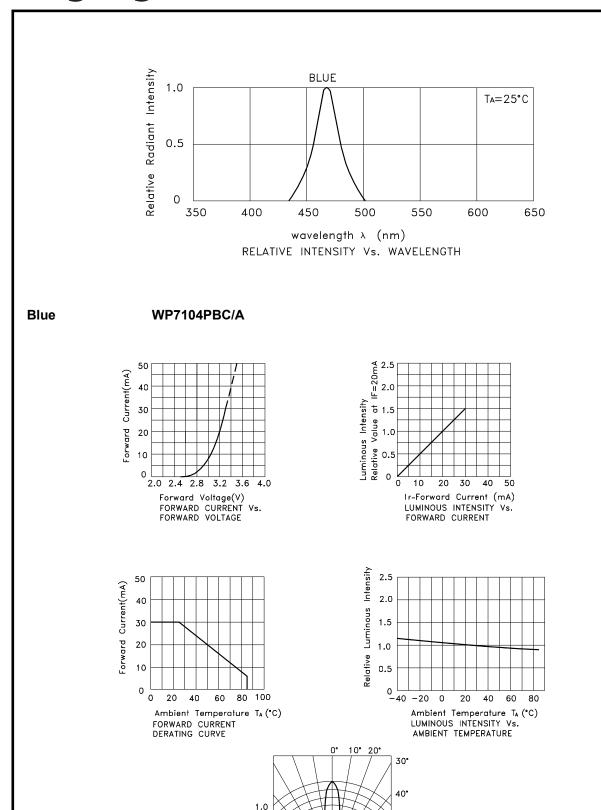
Absolute Maximum Ratings at TA=25°C

| Parameter | Blue | Units | |
|-------------------------------|---------------------|-------|--|
| Power dissipation | 120 | mW | |
| DC Forward Current | 30 | mA | |
| Peak Forward Current [1] | Current [1] 100 | | |
| 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 | | |

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

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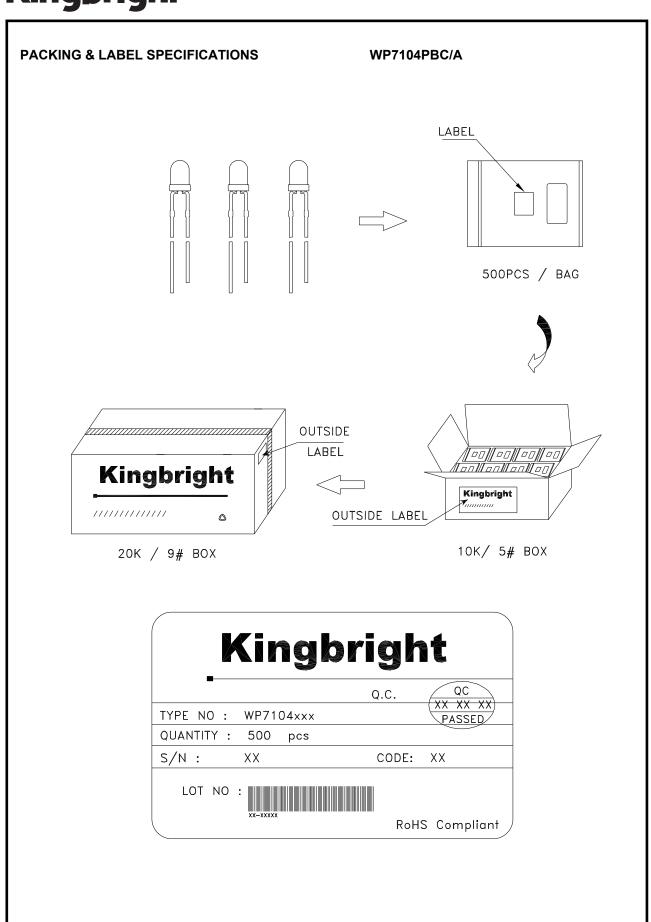
SPATIAL DISTRIBUTION

0.7

50° 60° 70° 80°

90°

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Mouser Electronics

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