

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

PRELIMINARY SPEC



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Part Number: WP7113PBC/Z

BLUE

### **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

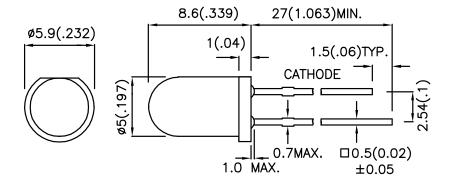
The Blue source color devices are made with InGaN Light Emitting Diode.

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.
- Holerance is ±0.25(0.017) unless otherwise noted.
   Lead spacing is measured where the leads emerge from the package.
- Specifications are subject to change without notice.

 SPEC NO: DSAG9882
 REV NO: V.1
 DATE: NOV/17/2006
 PAGE: 1 OF 4

 APPROVED: J. Lu
 CHECKED: Allen Liu
 DRAWN: W.J.ZHU
 ERP: 1101019742

# Kingbright

## **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Тур.	2 θ 1/2
WP7113PBC/Z	BLUE (InGaN)	WATER CLEAR	2200	5000	16°

- 1. 01/2 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	458		nm	IF=20mA
λD [1]	Dominant Wavelength	Blue	465		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Blue	22		nm	IF=20mA
С	Capacitance	Blue	110		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Blue	3.2	3.7	V	IF=20mA
IR	Reverse Current	Blue		10	uA	VR = 5V

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

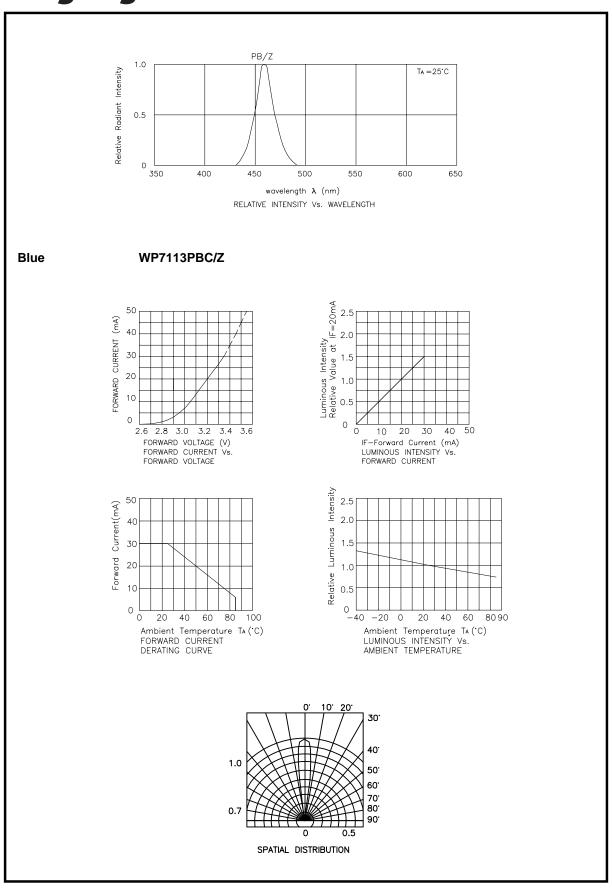
# Absolute Maximum Ratings at Ta=25°C

Parameter	Blue	Units		
Power dissipation	111	mW		
DC Forward Current	30	mA		
Peak Forward Current [1]	100	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			

- 1. 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2. 2mm below package base.
- 3. 5mm below package base.

SPEC NO: DSAG9882 **REV NO: V.1** DATE: NOV/17/2006 PAGE: 2 OF 4 APPROVED: J. Lu CHECKED: Allen Liu DRAWN: W.J.ZHU ERP: 1101019742

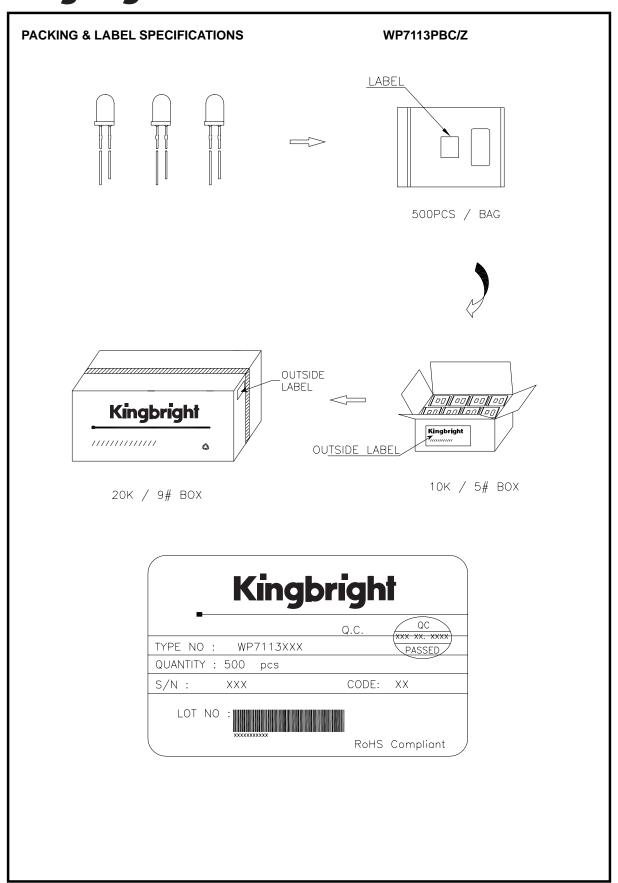
# Kingbright



 SPEC NO: DSAG9882
 REV NO: V.1
 DATE: NOV/17/2006
 PAGE: 3 OF 4

 APPROVED: J. Lu
 CHECKED: Allen Liu
 DRAWN: W.J.ZHU
 ERP: 1101019742

# Kingbright



SPEC NO: DSAG9882 APPROVED: J. Lu REV NO: V.1 CHECKED: Allen Liu DATE: NOV/17/2006 DRAWN: W.J.ZHU PAGE: 4 OF 4 ERP: 1101019742