

# T-1 (3mm) SOLID STATE LAMP



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

P/N: L-7104PBC

**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

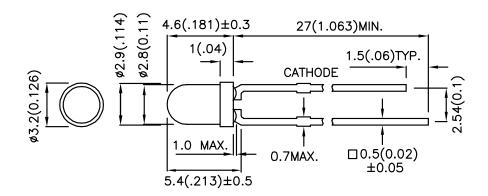
The Blue source color devices are made with InGaN on SiC Light Emitting Diode.

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**



- 1. All dimensions are in millimeters (inches).
  2. Tolerance is ±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.

SPEC NO: DSAB0171 APPROVED: J. Lu

**REV NO: V.8** 

CHECKED: Allen Liu

**DATE: NOV/19/2005** DRAWN: W.J.ZHU

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## **Selection Guide**

Part No.	Dice	Iv (mcd) @ 20mA		,	Viewing Angle
			Min.	Тур.	201/2
L-7104PBC	BLUE (InGaN)	WATER CLEAR	180	450	20°

# Electrical / Optical Characteristics at Ta=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Blue	468		nm	IF=20mA
λD	Dominant Wavelength	Blue	470		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Blue	25		nm	IF=20mA
С	Capacitance	Blue	65		pF	VF=0V;f=1MHz
VF	Forward Voltage	Blue	3.65	4.2	V	IF=20mA
lR	Reverse Current	Blue		10	uA	VR = 5V

# Absolute Maximum Ratings at Ta=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			

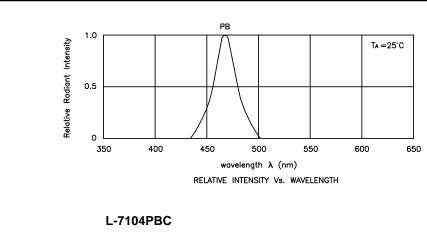
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- 1. 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2. 2mm below package base.
- 3. 5mm below package base.

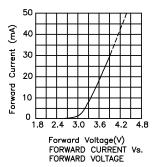
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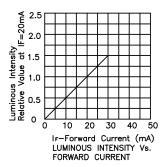
Note: 1.  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

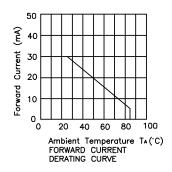
# Kingbright

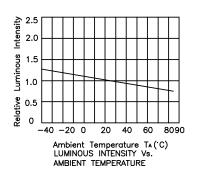


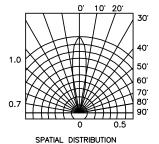
Blue











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

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

Note: Accuracy may depend on the sorting parameters.

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