

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



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE

DEVICES

WP7113MBD

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 GaN on SiC Light Emitting Diode.

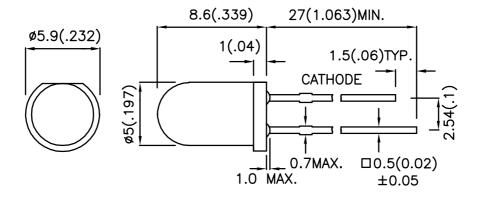
Static electricity and surge damage the LEDS.

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:

- All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.25(0.01")$ unless otherwise noted.
- Lead spacing is measured where the leads emerge from the package.
- 4. Specifications are subject to change without notice.

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 APPROVED: J. Lu
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 ERP:1101005103

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Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20 mA		Viewing Angle
			Min.	Тур.	201/2
WP7113MBD	BLUE (GaN)	BLUE DIFFUSED	36	60	20°

Note

Electrical / Optical Characteristics at Ta=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Blue	430		nm	I _F =20mA
λD	Dominant Wavelength	Blue	466		nm	I _F =20mA
Δλ1/2	Spectral Line Half-width	Blue	60		nm	I _F =20mA
С	Capacitance	Blue	100		pF	V _F =0V;f=1MHz
V _F	Forward Voltage	Blue	3.8	4.5	V	I _F =20mA
I _R	Reverse Current	Blue		10	uA	V _R = 5V

Absolute Maximum Ratings at Ta=25°C

Parameter	Blue	Units		
Power dissipation	105	mW		
DC Forward Current	30	mA		
Peak Forward Current [1]	Forward Current [1] 150			
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			

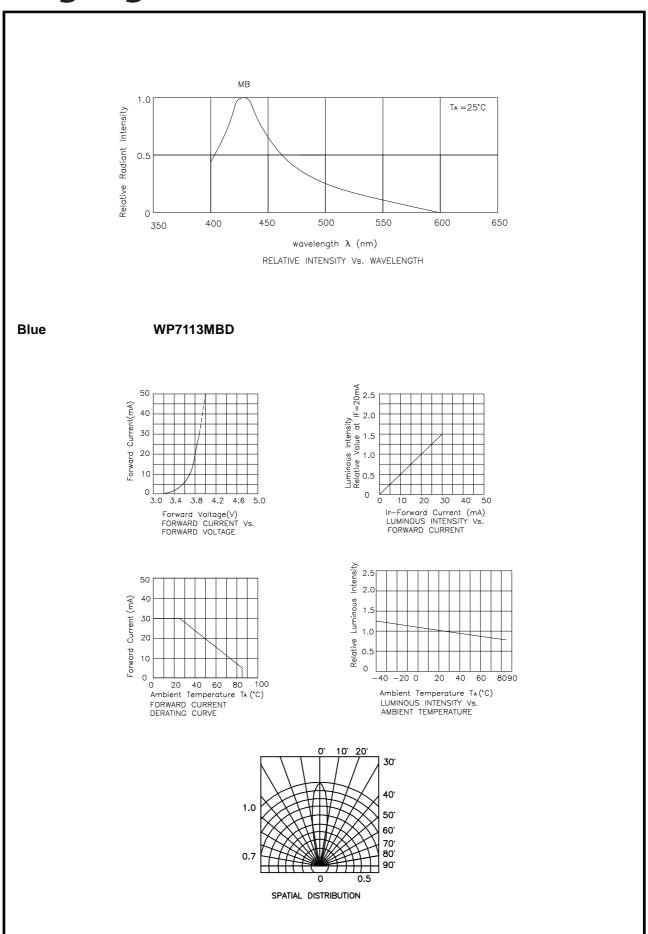
Notes:

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

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 $^{1.\,\}theta1/2$ is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

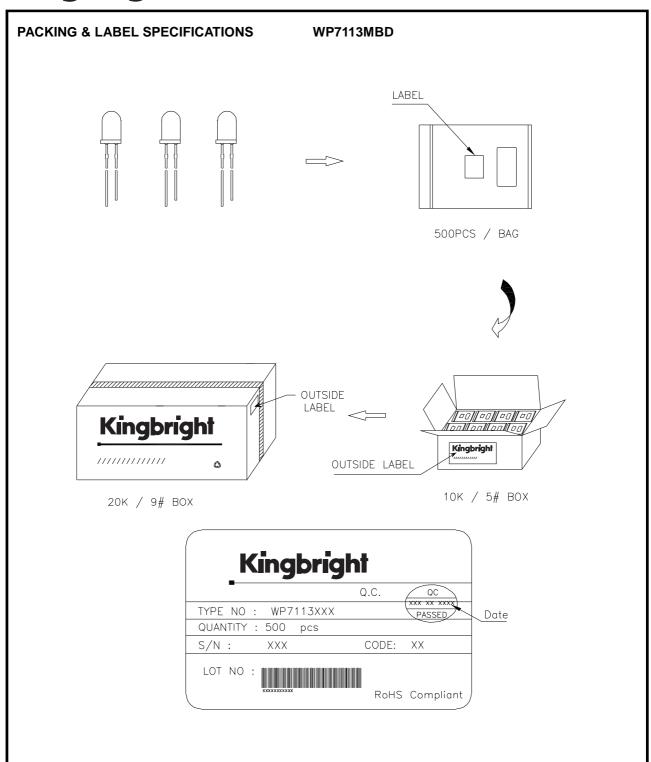
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Remarks:

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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