



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

KPBA-3010PBVGC

BLUE / GREEN

Features

- 3.0mmx1.0mm RIGHT ANGLE SMT LED, 2.0mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLRS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.

Description

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

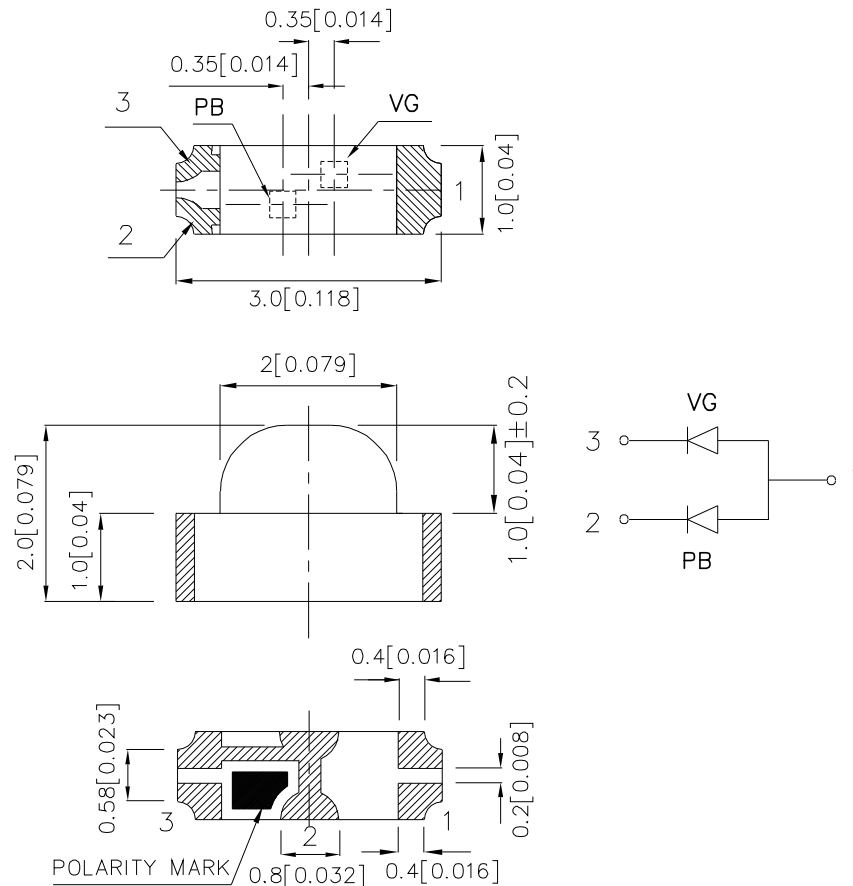
The Green source color devices are made with InGaN on SiC Light Emitting Diode.

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 $\pm 0.15(0.006)$ unless otherwise noted.
3. Specifications are subject to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	2θ1/2
KPBA-3010PBVGC	BLUE (InGaN)	WATER CLEAR	18	60	140°
	GREEN (InGaN)		50	120	

Note:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at TA=25°C

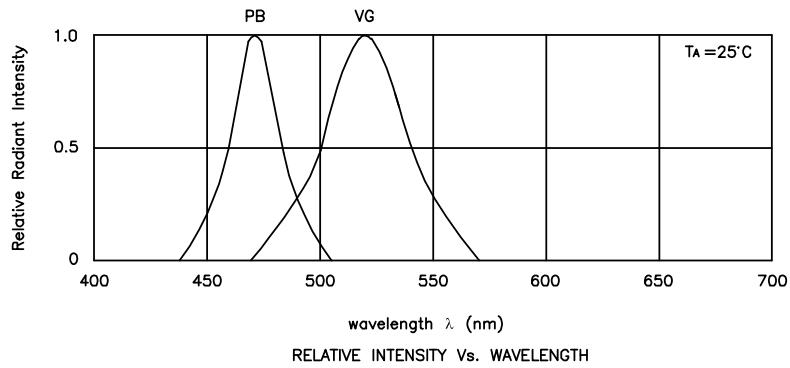
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Blue Green	468 520		nm	IF=20mA
λ_D	Dominant Wavelength	Blue Green	470 525		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Blue Green	25 38		nm	IF=20mA
C	Capacitance	Blue Green	65 45		pF	VF=0V;f=1MHz
VF	Forward Voltage	Blue Green	3.65 3.5	4.2 4.5	V	IF=20mA
IR	Reverse Current	All		10	uA	VR = 5V

Absolute Maximum Ratings at TA=25°C

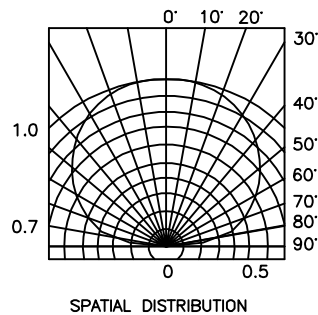
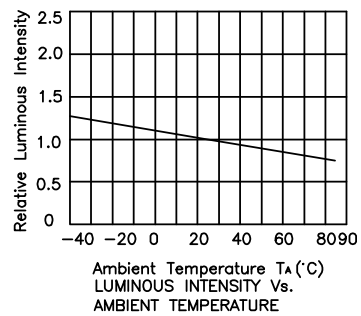
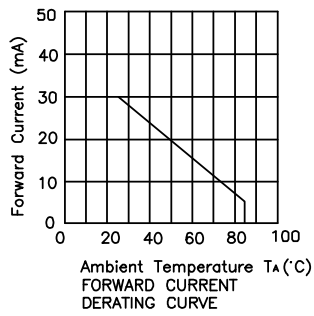
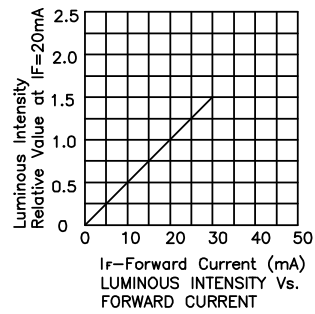
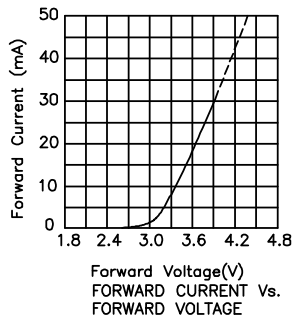
Parameter	Blue	Green	Units
Power dissipation	102	105	mW
DC Forward Current	30	30	mA
Peak Forward Current [1]	160	150	mA
Reverse Voltage	5		V
Operating / Storage Temperature	-40°C To +85°C		

Note:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.

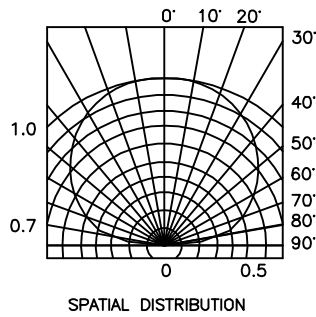
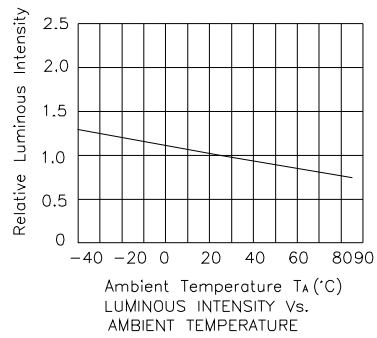
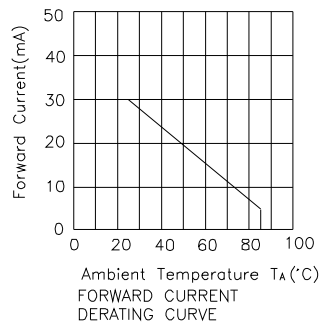
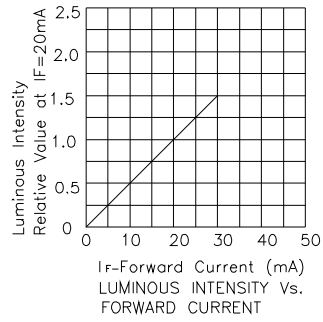
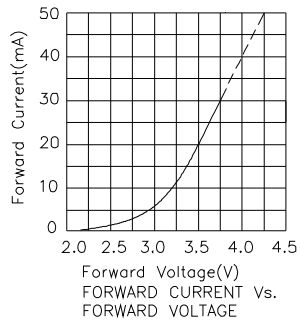


KPBA-3010PBVG Blue



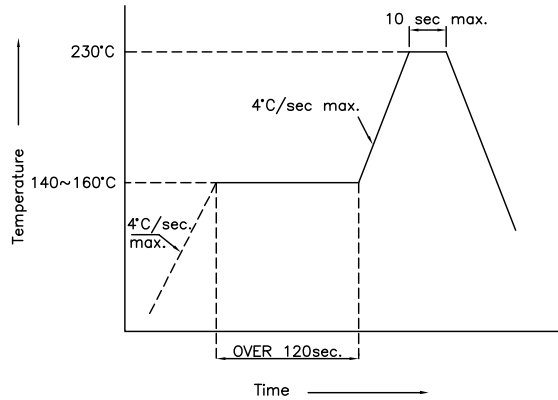
Kingbright

Green

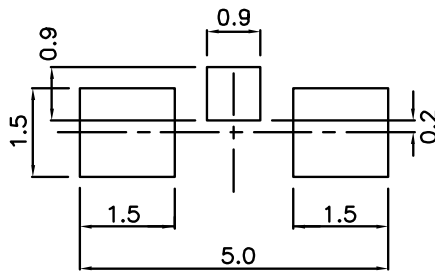


KPBA-3010PBVGC SMT Reflow Soldering Instructions

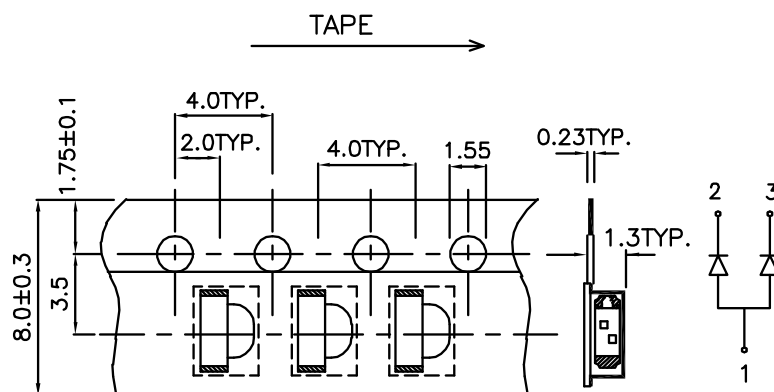
Number of reflow process shall be 2 times or less and cooling process to normal temperature is required between first and second soldering process.



Recommended Soldering Pattern (Units : mm)



Tape Specifications (Units : mm)



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.