Kingbright

3.2x2.4mm SMD CHIP LED LAMP

ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

KPD-3224PBC BLUE

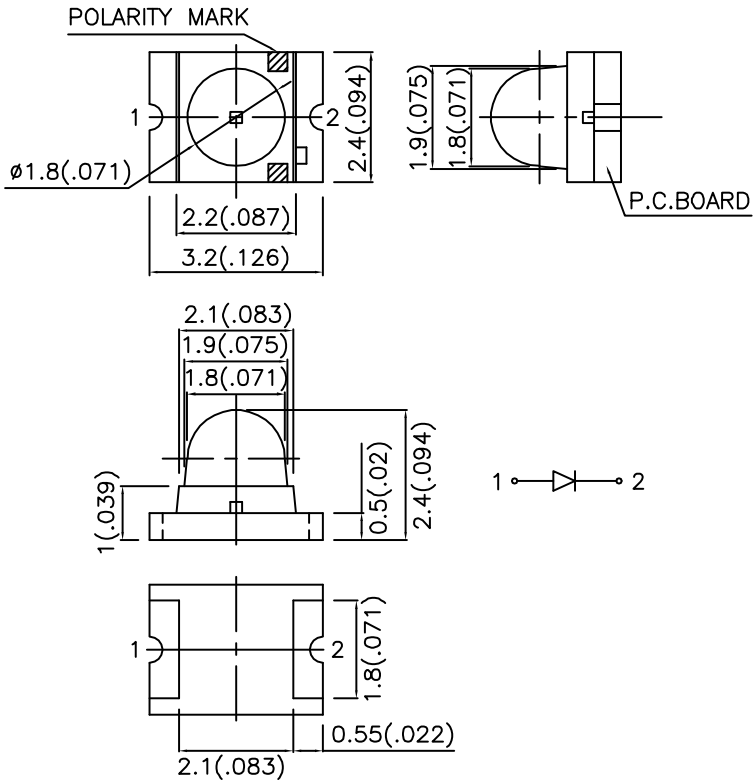
Features

- 3.2x2.4mm SMT LED, 2.4mm THICKNESS.
- LOW POWER CONSUMPTION.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 1500PCS / REEL.

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



Notes:
1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.1(0.004") unless otherwise noted.
3.Specifications are subject to change without notice.

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Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	2θ1/2
KPD-3224PBC	BLUE (InGaN)	WATER CLEAR	110	380	20°

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

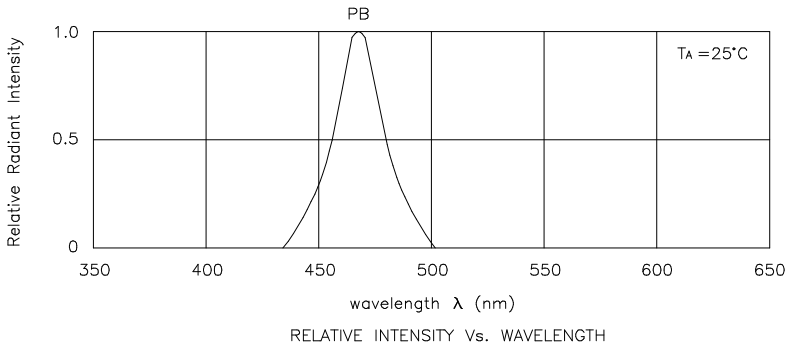
Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Blue	468		nm	I_F=20mA
λD	Dominant Wavelength	Blue	470		nm	I_F=20mA
Δλ1/2	Spectral Line Half-width	Blue	25		nm	I_F=20mA
C	Capacitance	Blue	65		pF	V_F=0V;f=1MHz
V_F	Forward Voltage	Blue	3.65	4.2	V	I_F=20mA
I_R	Reverse Current	Blue		10	uA	V_R = 5V

Absolute Maximum Ratings at T_A=25°C

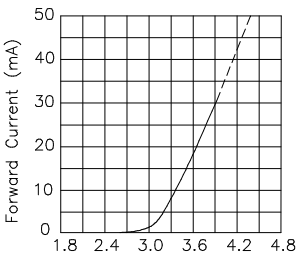
Parameter	Blue	Units
Power dissipation	102	mW
DC Forward Current	30	mA
Peak Forward Current [1]	160	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

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

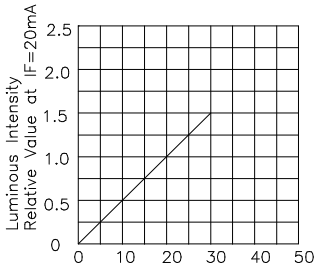


RELATIVE INTENSITY Vs. WAVELENGTH

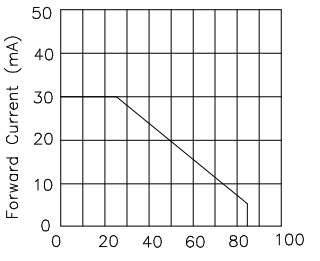
Blue **KPD-3224PBC**



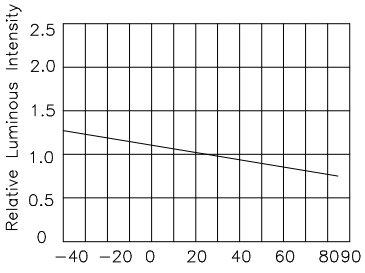
FORWARD CURRENT Vs.
FORWARD VOLTAGE



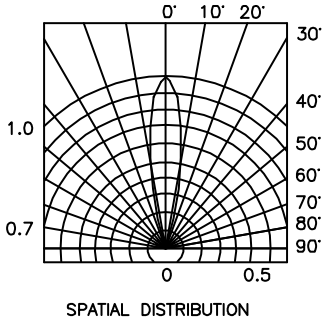
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



FORWARD CURRENT
DERATING CURVE



LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE

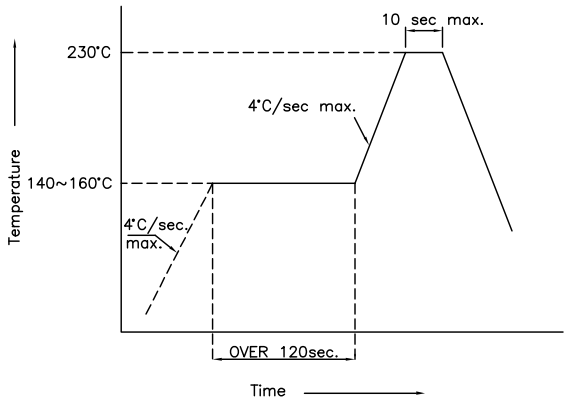


SPATIAL DISTRIBUTION

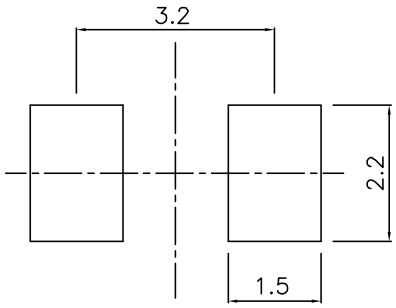
KPD-3224PBC

SMT Reflow Soldering Instructions

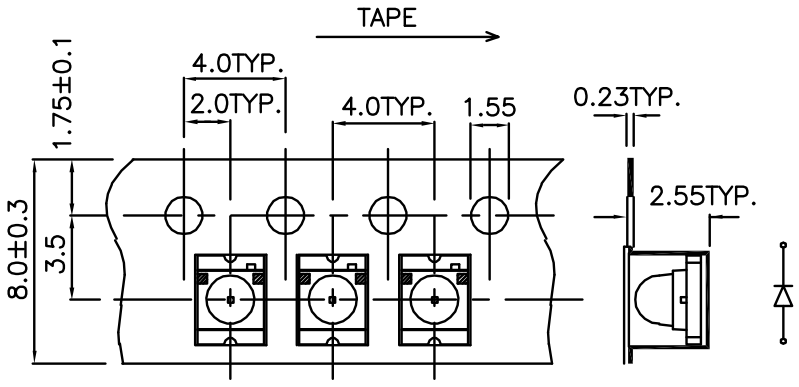
Number of reflow process shall be 2 times or less and cooling process to normal temperature is required between first and second soldering process.



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.