1.6X0.8mm SMD CHIP LED LAMP



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE

DEVICES

KPT-1608PBC

BLUE

PAGE: 1 OF 4

Features

- •1.6mmX0.8mm SMT LED, 0.75mm THICKNESS.
- •LOW POWER CONSUMPTION.
- •WIDE VIEWING ANGLE.
- •IDEAL FOR BACKLIGHT AND INDICATOR.
- •VARIOUS COLORS AND LENS TYPES AVAILABLE.
- •PACKAGE: 2000PCS / REEL .
- •RoHS COMPLIANT.

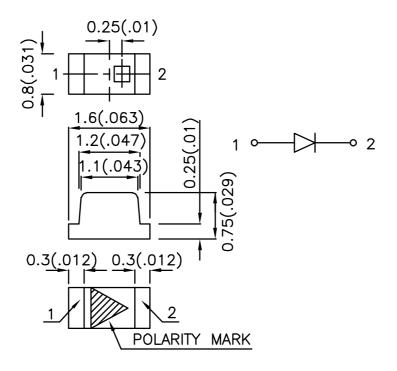
Description

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



Notes

- All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.1(0.004")$ unless otherwise noted.
- 3. Specifications are subject to change without notice.

SPEC NO: DSAA4508 REV NO: V.8 DATE: MAR/16/2005
APPROVED: J. Lu CHECKED: Allen Liu DRAWN: Y.W.WANG

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Тур.	2 θ 1/2
KPT-1608PBC	BLUE (InGaN)	WATER CLEAR	18	60	120°

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
IR	Reverse Current	Blue		10	uA	VR = 5V

Absolute Maximum Ratings at Ta=25°C

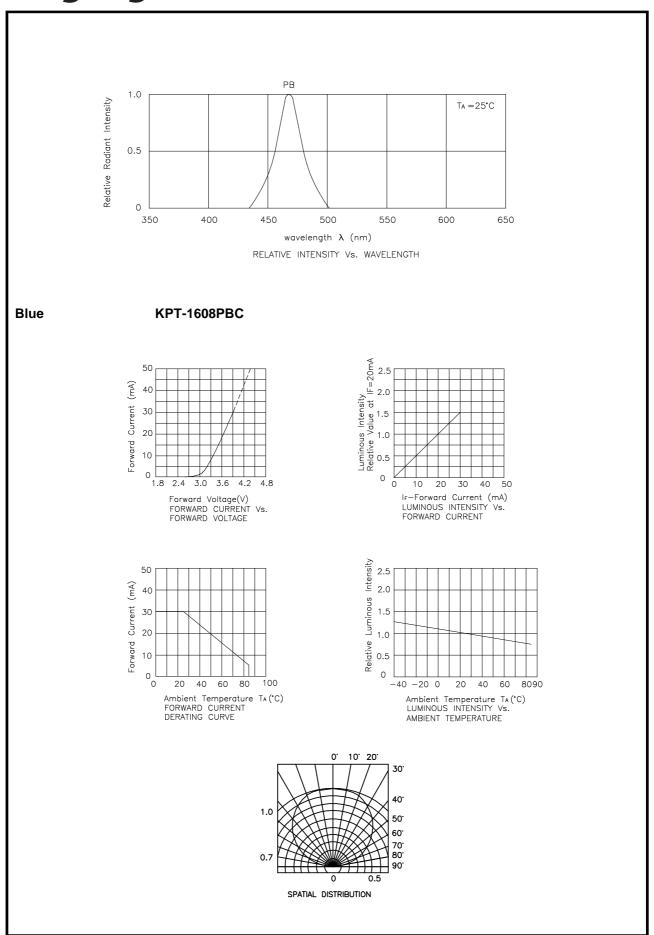
Parameter	Blue	Units	
Power dissipation	102	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	160	mA	
Reverse Voltage	5	V	
Operating/Storage Temperature	-40°C To +85°C		

SPEC NO: DSAA4508 **REV NO: V.8** DATE: MAR/16/2005 PAGE: 2 OF 4 **CHECKED: Allen Liu** DRAWN: Y.W.WANG

APPROVED: J. Lu

Note:
1. 01/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

^{1. 1/10} Duty Cycle, 0.1ms Pulse Width.

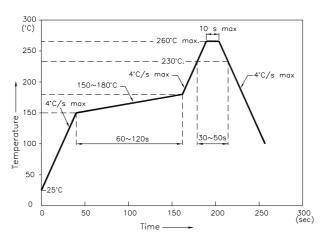


SPEC NO: DSAA4508 **REV NO: V.8 DATE: MAR/16/2005** PAGE: 3 OF 4 **CHECKED: Allen Liu** DRAWN: Y.W.WANG

APPROVED: J. Lu

KPT-1608PBC

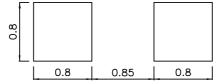
Reflow Soldering Profile For Lead-free SMT Process.



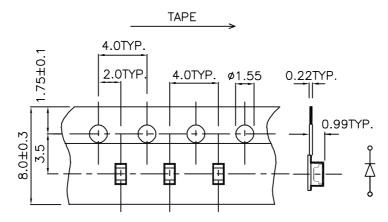
NOTES:

- We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.
- 2.Don't cause stress to the epoxy resin while it $\,$ is exposed to high temperature.
- 3. Number of reflow process shall be 2 times or less.

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.

SPEC NO: DSAA4508 REV NO: V.8 DATE: MAR/16/2005 PAGE: 4 OF 4
APPROVED: J. Lu CHECKED: Allen Liu DRAWN: Y.W.WANG