

5.0X6.0mm SURFACE MOUNT LED LAMP



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

AA5060PBC/H

BLUE

Features

- SINGLE COLOR.
- SUITABLE FOR ALL SMT ASSEMBLY AND SOLDER PROCESS.
- AVAILABLE ON TAPE AND REEL.
- IDEAL FOR BACKLIGHTING.
- PACKAGE: 500PCS / REEL.
- RoHS COMPLIANT.

Description

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

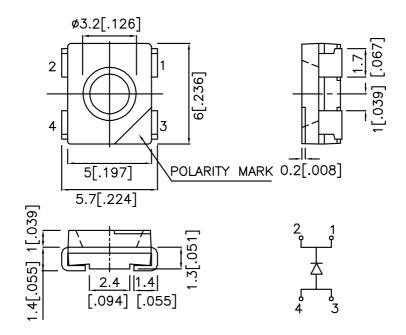
Static electricity and surge damage the LEDS.

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:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.25 (0.01")$ unless otherwise noted.
- 3. Specifications are subject to change without notice.

SPEC NO: DSAB8382 APPROVED: J. Lu REV NO: V.5 CHECKED: Allen Liu DATE: MAR/08/2005 DRAWN: S.H.CHEN PAGE: 1 OF 4 ERP:1201000520

Kingbright

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) Lens Type @ 30mA		Viewing Angle
			Min.	Тур.	2 01/2
AA5060PBC/H	BLUE (InGaN)	WATER CLEAR	280	500	100°

Note:

Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Blue	467		nm	IF=20mA
λD	Dominant Wavelength	Blue	470		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Blue	30		nm	IF=20mA
С	Capacitance	Blue	110		pF	VF=0V;f=1MHz
VF	Forward Voltage	Blue	3.7	4.3	V	IF=20mA
IR	Reverse Current	Blue		10	uA	VR = 5V

Absolute Maximum Ratings at TA=25°C

Parameter	Blue	Units
Power dissipation	129	mW
DC Forward Current	30	mA
Peak Forward Current [1]	100	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

Note

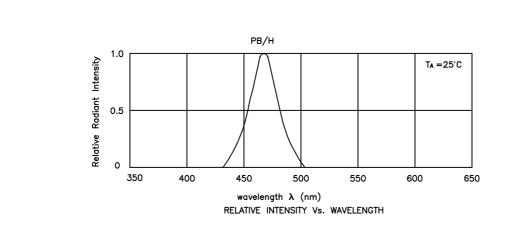
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

 SPEC NO: DSAB8382
 REV NO: V.5
 DATE: MAR/08/2005
 PAGE: 2 OF 4

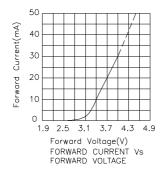
 APPROVED: J. Lu
 CHECKED: Allen Liu
 DRAWN: S.H.CHEN
 ERP:1201000520

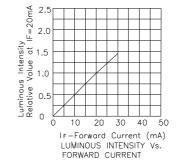
 $^{1.\,\}theta1/2$ is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

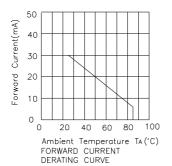
Kingbright

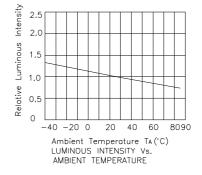


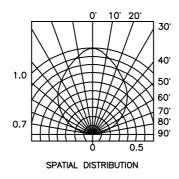
Blue AA5060PBC/H











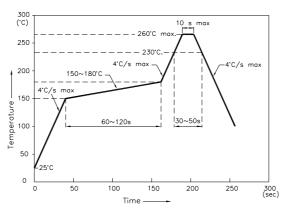
 SPEC NO: DSAB8382
 REV NO: V.5
 DATE: MAR/08/2005
 PAGE: 3 OF 4

 APPROVED: J. Lu
 CHECKED: Allen Liu
 DRAWN: S.H.CHEN
 ERP:1201000520

Kingbright

AA5060PBC/H

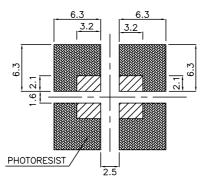
Reflow Soldering Profile For Lead-free SMT Process.



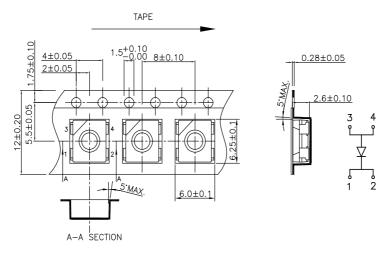
NOTES:

- 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 there is sorting requirement (eg. forward voltage, luminous intensity or wavelength), the condition as follows:

- 1. Wavelength: +/-1nm (Test condition is based on the sorting standard).
- 2.Luminous intensity: +/-15% (Test condition is based on the sorting standard).
- 3. Forward voltage: +/-0.1V (Test condition is based on the sorting standard).

 SPEC NO: DSAB8382
 REV NO: V.5
 DATE: MAR/08/2005
 PAGE: 4 OF 4

 APPROVED: J. Lu
 CHECKED: Allen Liu
 DRAWN: S.H.CHEN
 ERP:1201000520