

APK3520PBC BLUE

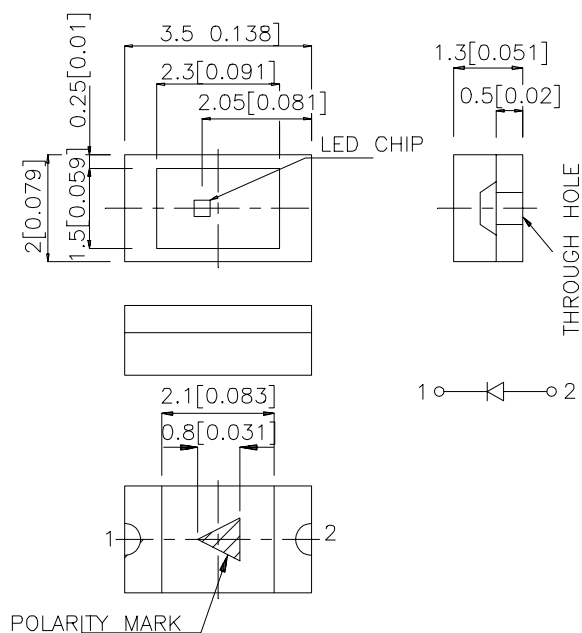
### Features

- 3.5mmX2.0mm SMT LED, 1.3mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.

### Description

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

### Package Dimensions



#### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2$  (0.0079") unless otherwise noted.
3. Specifications are subject to change without notice.

## Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20 mA		Viewing Angle
			Min.	Typ.	2θ1/2
APK3520PBC	BLUE ( InGaN )	WATER CLEAR	18	60	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 T<sub>A</sub>=25°C

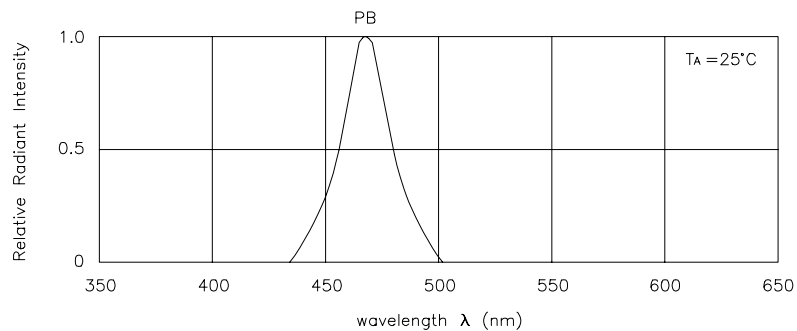
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ <sub>peak</sub>	Peak Wavelength	Blue	468		nm	I <sub>F</sub> =20mA
λ <sub>D</sub>	Dominate Wavelength	Blue	470		nm	I <sub>F</sub> =20mA
Δλ <sub>1/2</sub>	Spectral Line Half-width	Blue	25		nm	I <sub>F</sub> =20mA
C	Capacitance	Blue	65		pF	V <sub>F</sub> =0V;f=1MHz
V <sub>F</sub>	Forward Voltage	Blue	3.65	4.2	V	I <sub>F</sub> =20mA
I <sub>R</sub>	Reverse Current	Blue		10	μA	V <sub>R</sub> = 5V

## Absolute Maximum Ratings at T<sub>A</sub>=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:

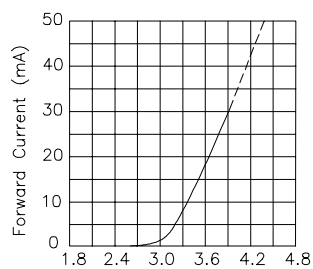
1. 1/10 Duty Cycle, 0.1ms Pulse Width.



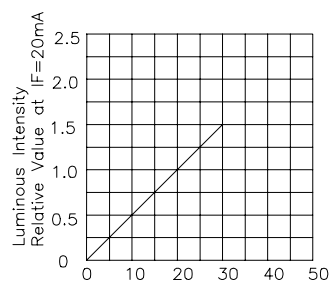
RELATIVE INTENSITY Vs. WAVELENGTH

Blue

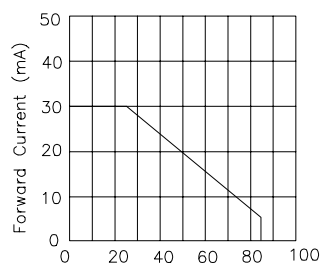
APK3520PBC



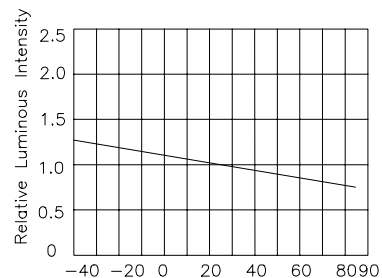
Forward Voltage(V)  
FORWARD CURRENT Vs.  
FORWARD VOLTAGE



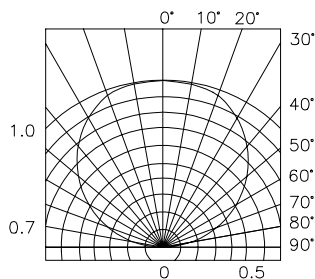
$I_F$ —Forward Current (mA)  
LUMINOUS INTENSITY Vs.  
FORWARD CURRENT



Ambient Temperature  $T_A$  ( $^\circ\text{C}$ )  
FORWARD CURRENT  
DERATING CURVE



Ambient Temperature  $T_A$  ( $^\circ\text{C}$ )  
LUMINOUS INTENSITY Vs.  
AMBIENT TEMPERATURE

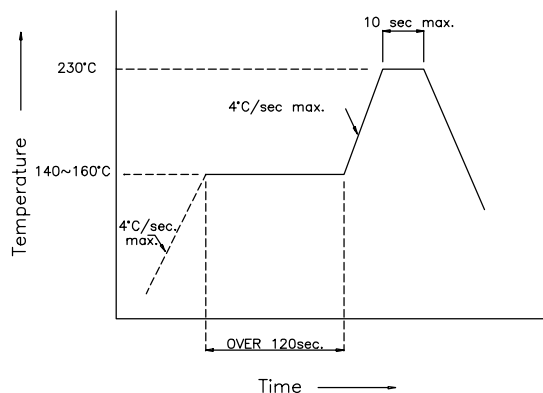


SPATIAL DISTRIBUTION

## APK3520PBC

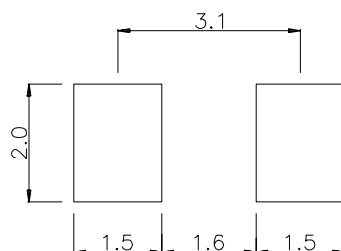
### SMT Reflow Soldering Instructions

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



### Recommended Soldering Pattern

(Units : mm)



### Tape Specifications

(Units : mm)

