

### SUBMINIATURE SOLID STATE LAMP

Blue

PRELIMINARY SPEC



**ATTENTION** OBSERVE PRECAUTIONS FOR HANDLING **ELECTROSTATIC** DISCHARGE SENSITIVE

**DEVICES** 

Part Number: KM2520PBC-J01

### **Features**

- SUBMINIATURE PACKAGE.
- WIDE VIEWING ANGLE.
- LONG LIFE SOLID STATE RELIABILITY.
- LOW PACKAGE PROFILE.
- MOISTURE SENSITIVITY LEVEL: LEVEL 3.
- RoHS COMPLIANT.

### Description

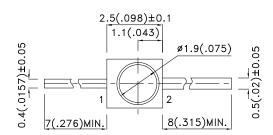
The Blue source color devices are made with InGaN on SiC Light Emitting Diode.

Static electricity and surge damage the LEDS.

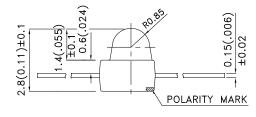
It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.

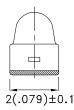
All devices, equipment and machinery must be electrically grounded.

## **Package Dimensions**









- 1. All dimensions are in millimeters (inches).
- Tolerance is ±0.25(0.01") unless otherwise noted.
  Lead spacing is measured where the leads emerge from the package.
  Specifications are subject to change without notice.





SPEC NO: DSAG3242 **APPROVED: WYNEC** 

**REV NO: V.2 CHECKED: Allen Liu**  **DATE: JUL/13/2007** DRAWN: Y.L.LI

PAGE: 1 OF 3 ERP: 1202001674

## Kingbright

### **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
T ut 110.	5.00	Lone Type	Min.	Тур.	2θ1/2
KM2520PBC-J01	Blue (InGaN)	WATER CLEAR	380	1000	20°

- 1.  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value. 2. Luminous intensity/ luminous Flux: +/-15%.

### Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Blue	467		nm	IF=20mA
λD [1]	Dominant Wavelength	Blue	470		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Blue	22		nm	IF=20mA
С	Capacitance	Blue	110		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Blue	3.2	4	V	IF=20mA
IR	Reverse Current	Blue		10	uA	V <sub>R</sub> =5V

- 1.Wavelength: +/-1nm.
- 2. Forward Voltage: +/-0.1V.

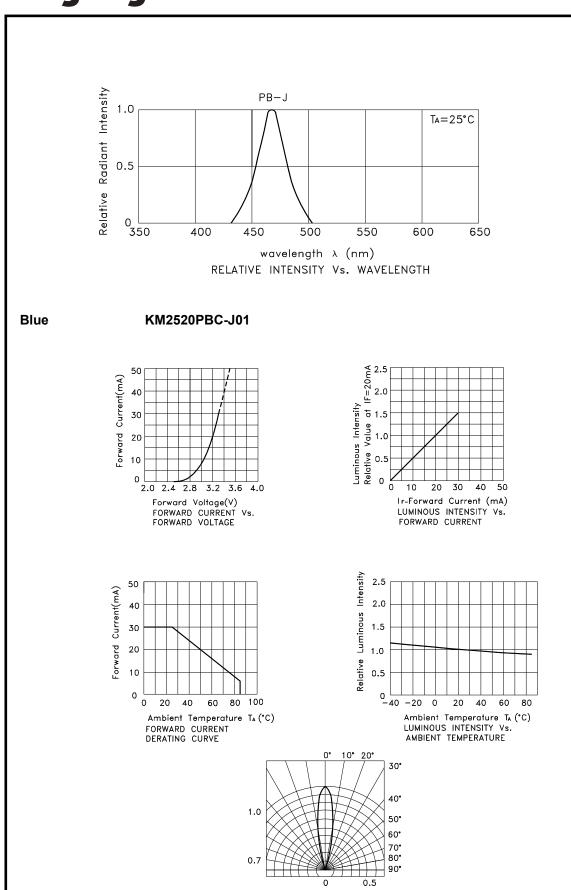
### Absolute Maximum Ratings at TA=25°C

Parameter	Blue	Units	
Power dissipation	120	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	100	mA	
Reverse Voltage	5	V	
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		
Lead Solder Temperature [2]	260°C For 3 Seconds		
Lead Solder Temperature [3]	260°C For 5 Seconds		

- 1. 1/10 Duty Cycle, 0.1ms Pulse Width. 2. 2mm below package base. 3. 5mm below package base.

DATE: JUL/13/2007 SPEC NO: DSAG3242 **REV NO: V.2** PAGE: 2 OF 3 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: Y.L.LI ERP: 1202001674

# **Kingbright**



SPEC NO: DSAG3242 APPROVED: WYNEC REV NO: V.2 CHECKED: Allen Liu DATE: JUL/13/2007 DRAWN: Y.L.LI

SPATIAL DISTRIBUTION

PAGE: 3 OF 3 ERP: 1202001674