

### SUBMINIATURE SOLID STATE LAMP

Part Number: KM2520QBC-D01 Blue



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

### **Features**

- Subminiature package.
- Long life solid state reliability.
- Low package profile.
- Moisture sensitivity level : level 3.
- RoHS compliant.

### Description

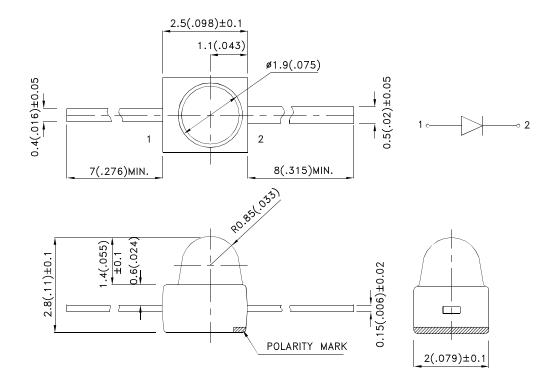
The Blue source color devices are made with InGaN Light Emitting Diode.

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).
- 2. Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.
- 3. Lead spacing is measured where the leads emerge from the package.
  4. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.

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## **Selection Guide**

Part No.	Dice Lens Type		lv (mcd) [2] @ 20mA		Viewing Angle [1]
		,	Min.	Тур.	201/2
KM2520QBC-D01	Blue (InGaN)	Water Clear	300	900	20°

- 1.  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
- Luminous intensity/ luminous Flux: +/-15%.
   Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

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

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Blue	460		nm	I==20mA
λD [1]	Dominant Wavelength	Blue	465		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Blue	25		nm	IF=20mA
С	Capacitance	Blue	100		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Blue	3.3	4	V	IF=20mA
lR	Reverse Current	Blue		50	uA	V <sub>R</sub> = 5V

- 1.Wavelength: +/-1nm.
- Forward Voltage: +/-0.1V.
   Wavelength value is traceable to the CIE127-2007 compliant national standards.

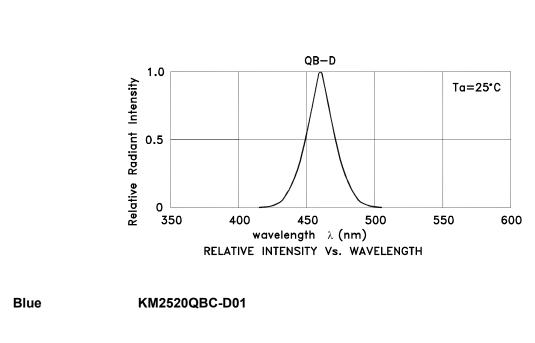
## Absolute Maximum Ratings at TA=25°C

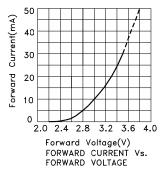
Parameter	Blue	Units	
Power dissipation	120	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	150	mA	
Reverse Voltage	5	V	
Operating/Storage Temperature	-40°C To +85°C		
Lead Solder Temperature [2]	260°C For 3 Seconds		
Lead Solder Temperature [3]	260°C For 5 Seconds		

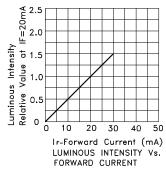
- 1. 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2. 2mm below package base.
   5mm below package base.

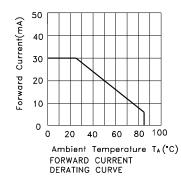
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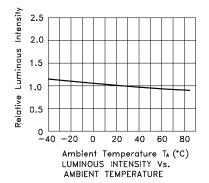
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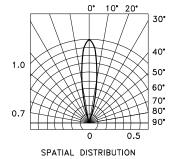






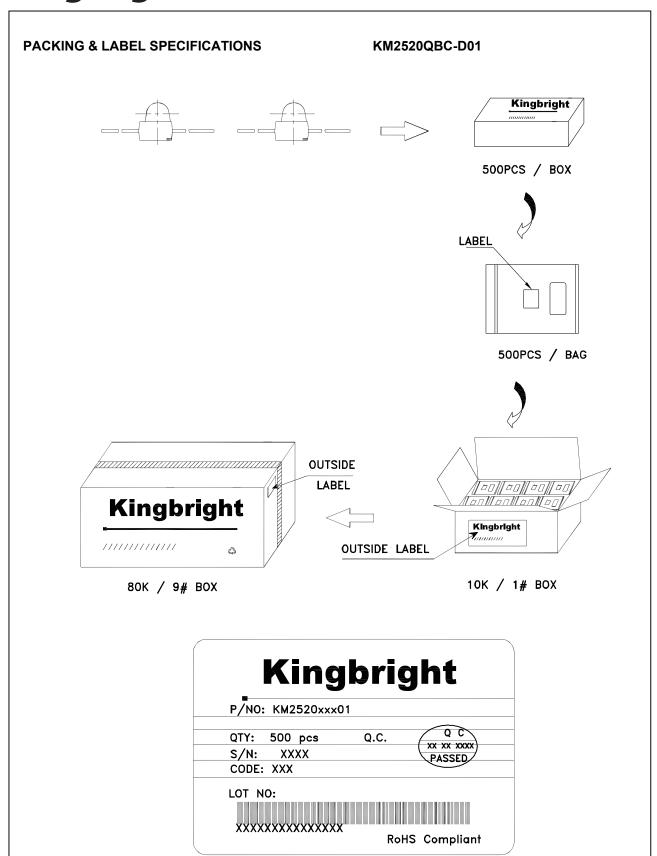






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Detailed application notes are listed on our website. http://www.kingbright.com/application\_notes

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