

SUBMINIATURE SOLID STATE LAMP

Part Number: KM2520QBC-G01 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

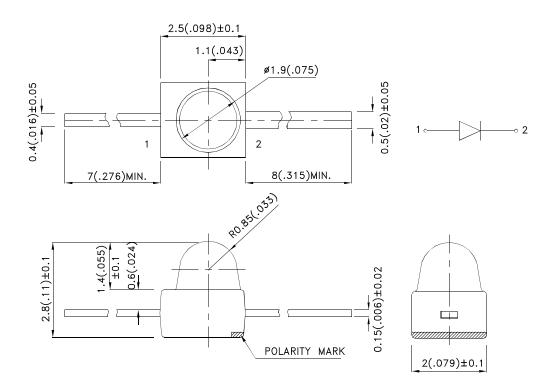
The Blue source color devices are made with InGaN Light Emitting Diode.

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 | Iv (mcd) [2] Dice | | | Viewing Angle [1] |
|---------------|--------------|---------------------|------|------|----------------------|
| | | 2. | Min. | Тур. | 201/2 |
| KM2520QBC-G01 | Blue (InGaN) | Water Clear | 700 | 1300 | 20° |

- 1. 01/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
 2. Luminous intensity/ luminous Flux: +/-15%.
 3. 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 | 461 | | nm | IF=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 _R = 5V |

Notes:

- 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] | 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 | | | |

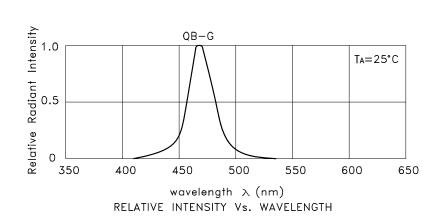
Notes:

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

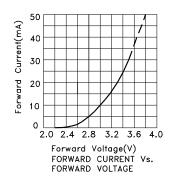
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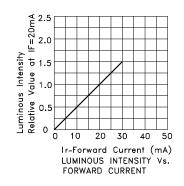
^{*}Wavelength value is traceable to the CIE127-2007 compliant national standards.

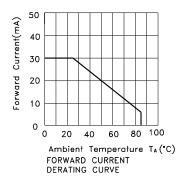
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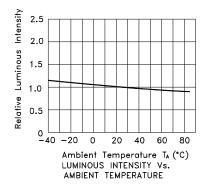


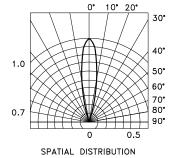
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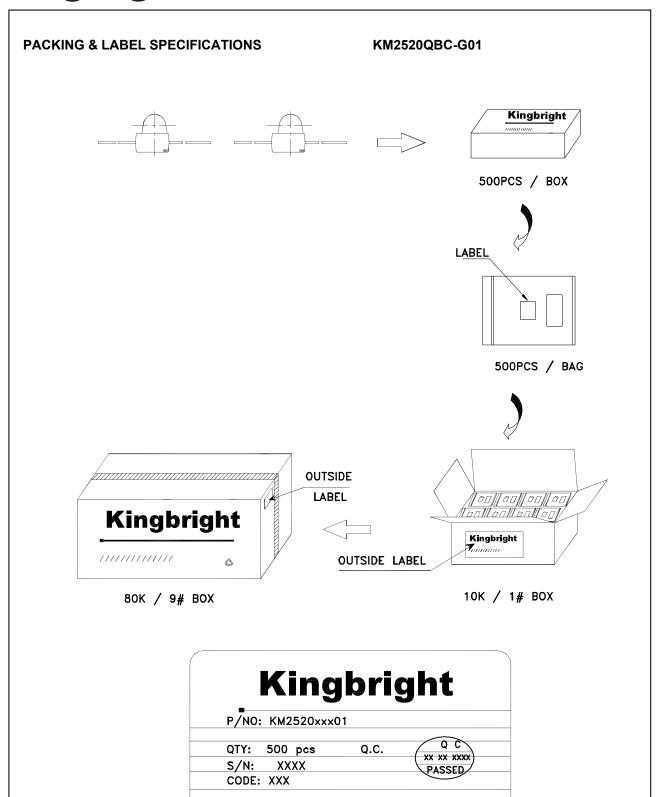




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Detailed application notes are listed on our website. http://www.kingbright.com/application notes

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RoHS Compliant

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