

Part Number: KPG-0603PBC-TT-5MAV

Blue



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

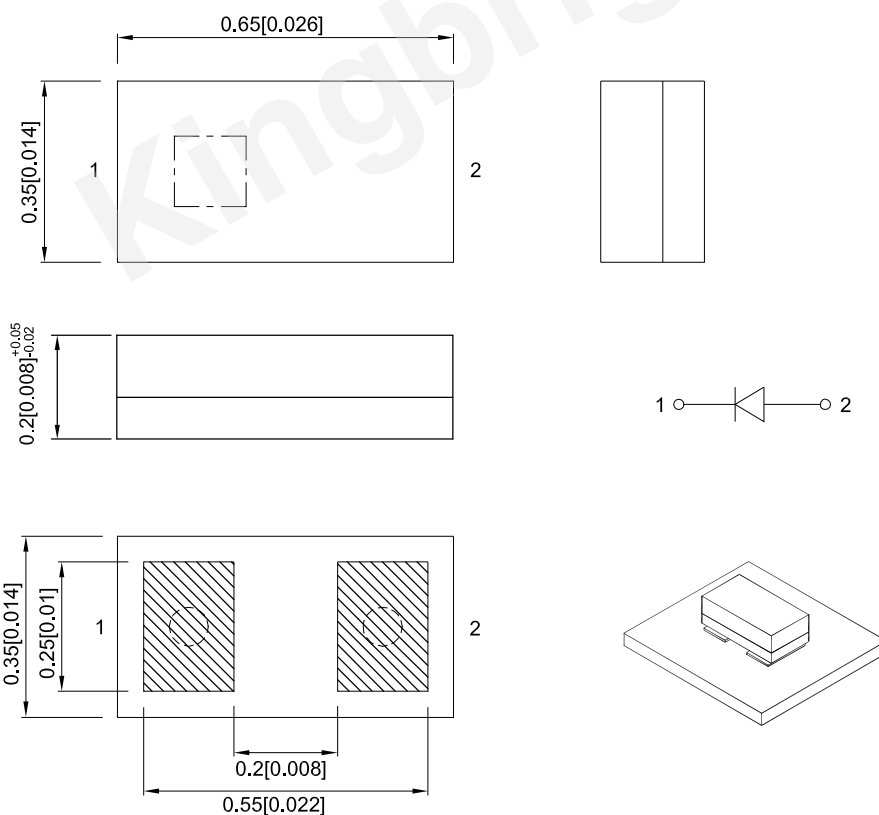
### Features

- 0.65mmX0.35mm SMD LED, 0.2mm thickness
- Low power consumption.
- Wide viewing angle.
- Compatible with automatic placement equipment.
- Package: 4000pcs / reel.
- Moisture sensitivity level : level 2.
- Low current IF=5mA operating.
- RoHS compliant.

### Descriptions

- The Blue source color devices are made with InGaN on SiC substrate Light Emitting Diode.
- Electrostatic discharge and power surge could damage the LEDs.
- It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.
- All devices, equipments and machineries must be electrically grounded.

### Package Dimensions



#### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.1$  (0.004") unless otherwise noted.
3. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
4. The device has a single mounting surface. The device must be mounted according to the specifications.



## Selection Guide

Part No.	Emitting Color (Material)	Lens Type	Iv (mcd) [2] @ 5mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
KPG-0603PBC-TT-5MAV	Blue (InGaN)	Water Clear	15	25	145°

### Notes:

1. θ1/2 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 CIE127-2007 standards.

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

Symbol	Parameter	Emitting Color	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Blue	461		nm	IF=5mA
λD [1]	Dominant Wavelength	Blue	467		nm	IF=5mA
Δλ1/2	Spectral Line Half-width	Blue	22		nm	IF=5mA
VF [2]	Forward Voltage	Blue	2.9	3.1	V	IF=5mA
IR	Reverse Current	Blue		50	uA	VR=5V

### Notes:

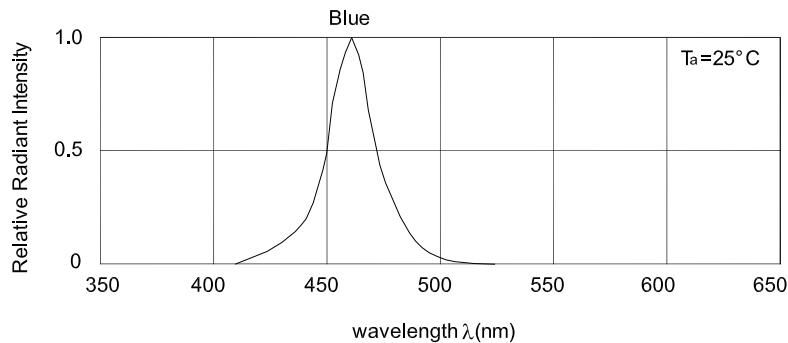
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.
3. Wavelength value is traceable to CIE127-2007 standards.
4. Excess driving current and / or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

## Absolute Maximum Ratings at TA=25°C

Parameter	Values	Units
Power dissipation	32	mW
DC Forward Current	10	mA
Peak Forward Current [1]	50	mA
Reverse Voltage	5	V
Electrostatic Discharge Threshold (HBM)	1000	V
Operating Temperature	-40°C To +85°C	
Storage Temperature	-40°C To +85°C	

### Notes:

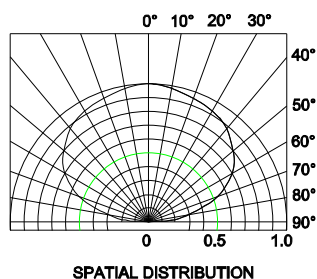
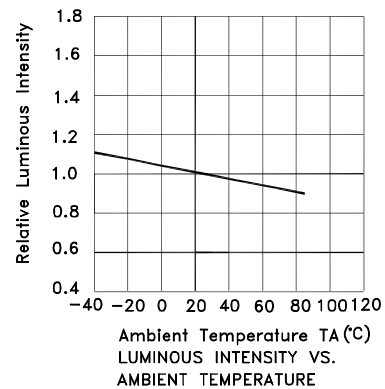
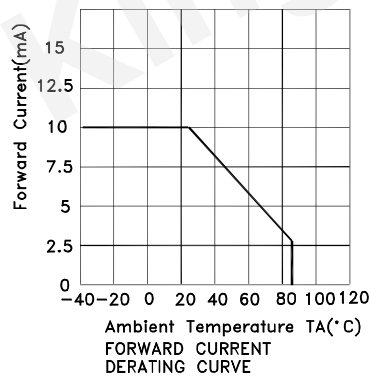
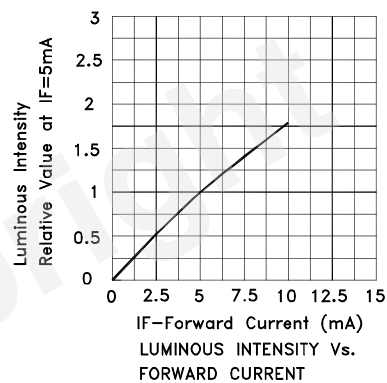
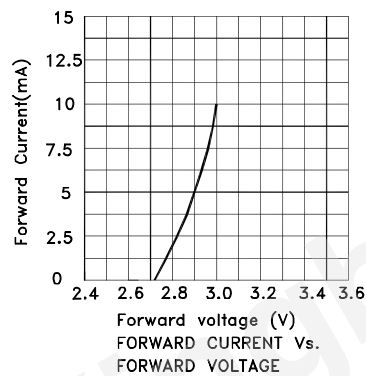
1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. Relative humidity levels maintained between 40% and 60% in production area are recommended to avoid the build-up of static electricity – Ref JEDEC/JESD625-A and JEDEC/J-STD-033.



Relative Intensity Vs. Wavelength

Blue

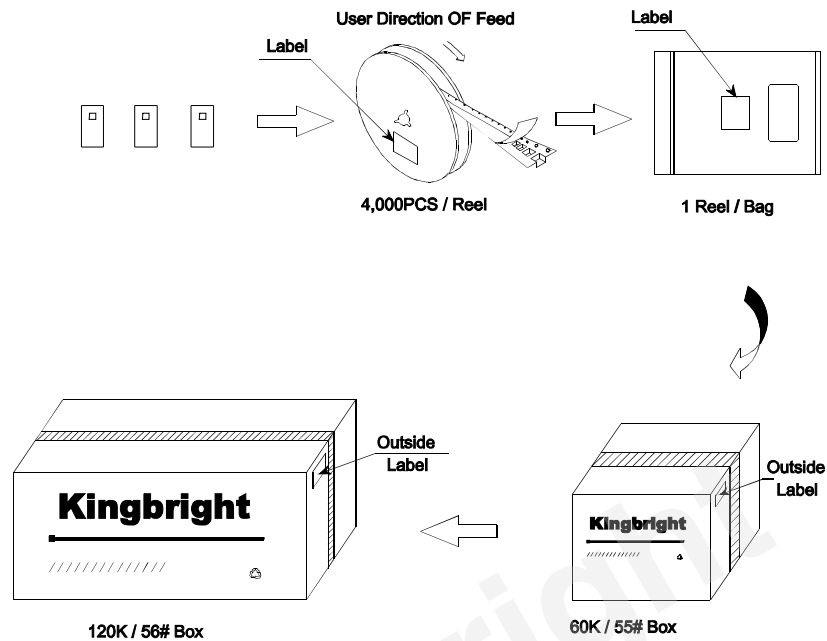
KPG-0603PBC-TT-5MAV






## PACKING & LABEL SPECIFICATIONS

KPG-0603PBC-TT-5MAV



<b>Kingbright</b>	
P/NO: KPG-0603xxx	
QTY: 4000 pcs	Q.C.
S/N: XXXX	Q C XX-XX-XXXX PASSED
CODE: XXX	
LOT NO:	
	
RoHS Compliant	

### Terms and conditions for the usage of this document

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2. The part number, type, and specifications mentioned in this document are subject to future change and improvement without notice. Before production usage customer should refer to the latest datasheet for the updated specifications.
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