

# 1.6X0.8mm SMD CHIP LED LAMP (0.25mm Height)

Blue

Part Number: KPG-1608LQBC-D



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

### **Features**

- 1.6mmX0.8mm SMT LED, 0.25mm thickness.
- Low power consumption.
- Wide viewing angle.
- Compatible with automatic placement equipment.
- Ideal for backlight and indicator.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 3.
- Low current IF=2mA operating.
- RoHS compliant.

# Description

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

Static electricity and surge damage the LEDS.

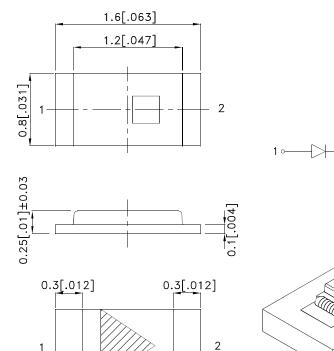
It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.

All devices, equipment and machinery must be electrically grounded.

## **Applications**

- 1. Mobile phone Keypad indicator and backlight.
- 2.Flat backlight for LCD, switch and symbol.
- 3.Toys.

# **Package Dimensions**





SPEC NO: DSAL3254

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- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ±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.

**POLARITY** 

MARK

PAGE: 1 OF 5 **REV NO: V.1** DATE: OCT/29/2010 CHECKED: Allen Liu DRAWN: C.H.Han ERP: 1203011428

# **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) [2] @ 2mA		Viewing Angle [1]
		-	Min.	Тур.	201/2
KPG-1608LQBC-D	Blue (InGaN)	Water Clear	6	13	120°

- 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%.

# Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions			
λpeak	Peak Wavelength	Blue	468		nm	IF=2mA			
λD [1]	Dominant Wavelength	Blue	470		nm	IF=2mA			
Δλ1/2	Spectral Line Half-width	Blue	25		nm	IF=2mA			
С	Capacitance	Blue	100		pF	VF=0V;f=1MHz			
VF [2]	Forward Voltage	Blue	2.65	4	V	IF=2mA			
lr	Reverse Current	Blue		50	uA	V <sub>R</sub> =5V			

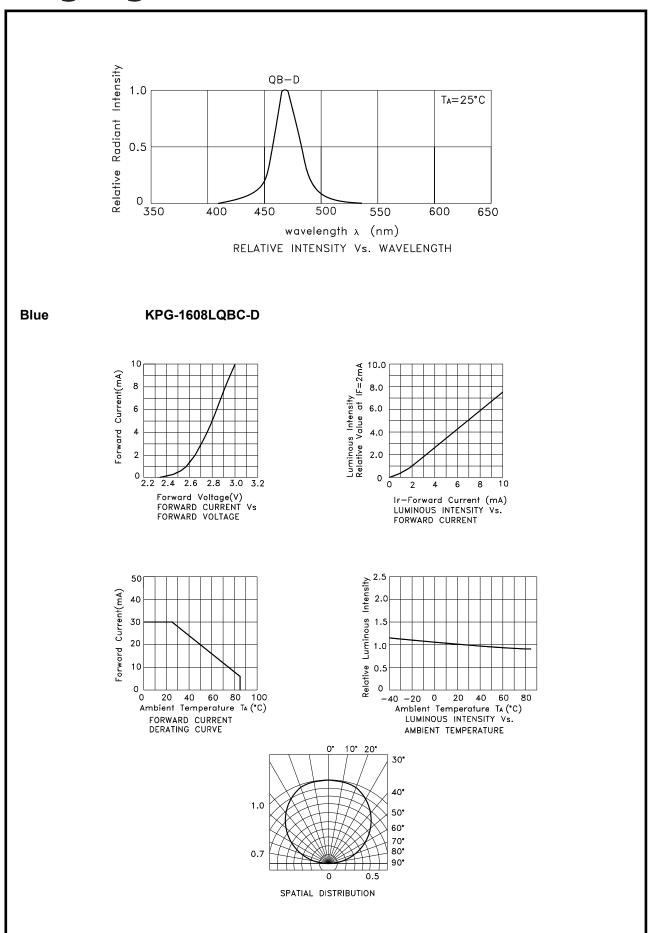
- Notes: 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

## Absolute Maximum Ratings at TA=25°C

<u></u>						
Parameter	Blue	Units				
Power dissipation	120	mW				
DC Forward Current	30	mA				
Peak Forward Current [1]	150	mA				
Reverse Voltage	5	V				
Operating Temperature	-40°C To +85°C					
Storage Temperature	-40°C To +85°C					

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

SPEC NO: DSAL3254 **REV NO: V.1** DATE: OCT/29/2010 PAGE: 2 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: C.H.Han ERP: 1203011428



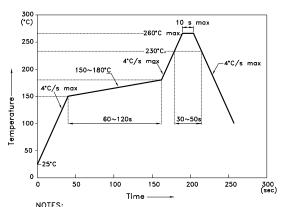
SPEC NO: DSAL3254 REV NO: V.1 DATE: OCT/29/2010 PAGE: 3 OF 5

APPROVED: WYNEC CHECKED: Allen Liu DRAWN: C.H.Han ERP: 1203011428

## KPG-1608LQBC-D

Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.



- NOTES:

  1.We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.

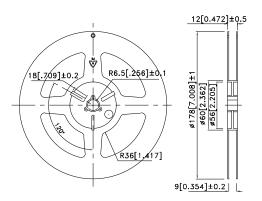
  2.Don't cause stress to the epoxy resin while it is exposed to high temperature.
  - to high temperature.

    3.Number of reflow process shall be 2 times or less.

# Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)

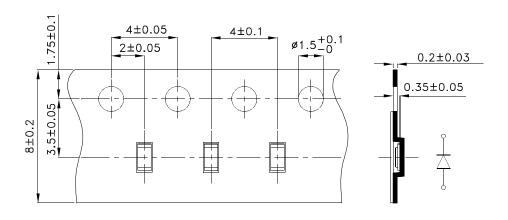
# 0.8 0.85 0.8

# **Reel Dimension**



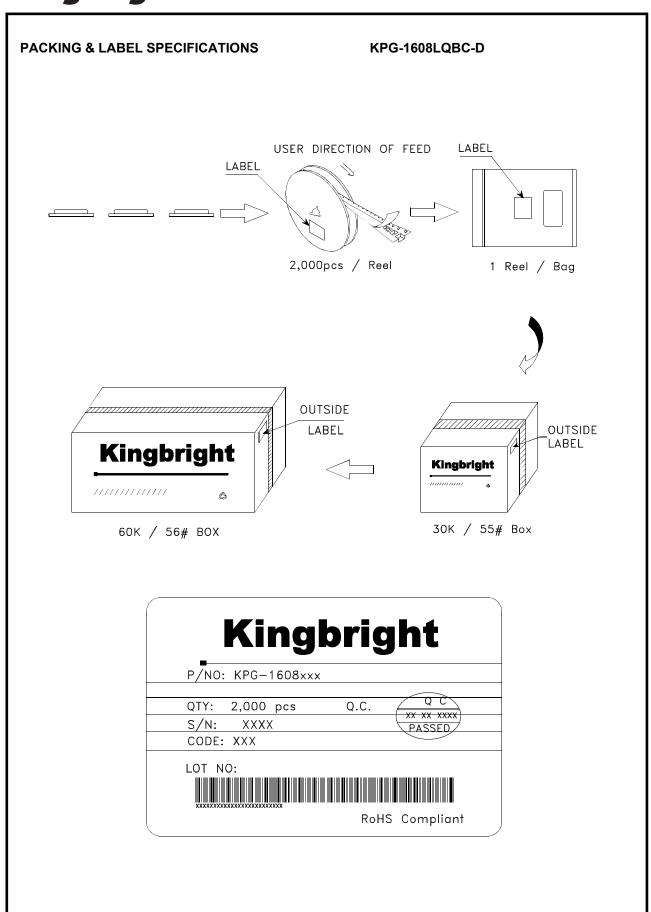
Tape Dimensions (Units : mm)

TAPE



 SPEC NO: DSAL3254
 REV NO: V.1
 DATE: OCT/29/2010
 PAGE: 4 OF 5

 APPROVED: WYNEC
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SPEC NO: DSAL3254 APPROVED: WYNEC REV NO: V.1 CHECKED: Allen Liu DATE: OCT/29/2010 DRAWN: C.H.Han PAGE: 5 OF 5 ERP: 1203011428