

3.0mmx1.5mm SMD CHIP LED LAMP

Part Number: APL3015QBC/G-F01 Blue



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

DEVICES

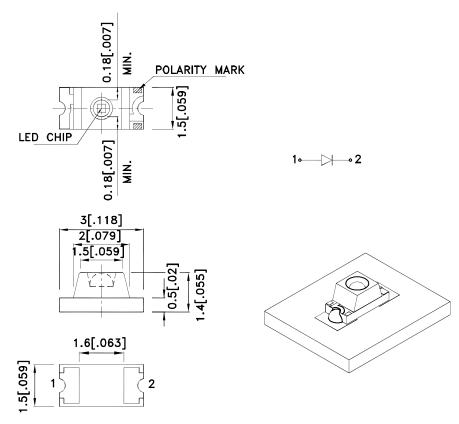
Features

- 3.0mmx1.5mm SMT LED, 1.4mm thickness.
- Low power consumption.
- Ideal for backlight and indicator.
- Package : 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

Descriptions

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

Package Dimensions



- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.2 (0.008")$ unless otherwise noted.
- The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
 The device has a single mounting surface. The device must be mounted according to the specifications.

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Selection Guide

Part No.	Dice	lv (mcd) [2] Dice Lens Type @ 20mA		,	Viewing Angle [1]
			Min.	Тур.	201/2
APL3015QBC/G-F01	Blue (InGaN)	Water Clear	120	300	70°

Notes:

- 1. θ 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	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			

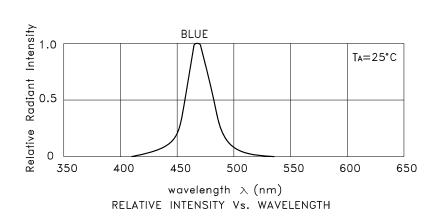
- 1.Wavelength: +/-1nm.
- 2.Forward Voltage: +/-0.1V.
- 3. Wavelength value is traceable to the CIE127-2007 compliant national standards.
- 4.Excess driving current and/or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

Absolute Maximum Ratings at TA=25°C

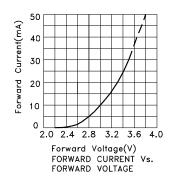
And of the control of						
Parameter	Blue	Units				
Power dissipation	120	mW				
OC Forward Current	30	mA				
Peak Forward Current [1]	150	mA				
Reverse Voltage	5	V				
Operating Temperature	-40°C To +85°C	-40°C To +85°C				
Storage Temperature	-40°C To +85°C					
Storage Temperature	verature -40°C To +85°C					

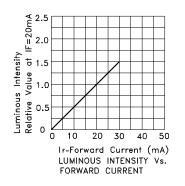
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

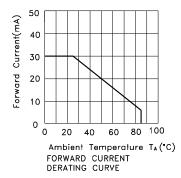
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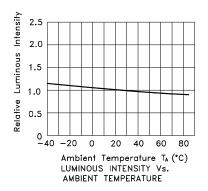


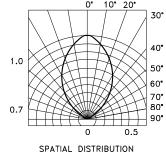
Blue APL3015QBC/G-F01











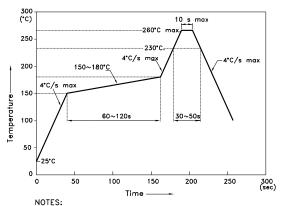
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Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

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.

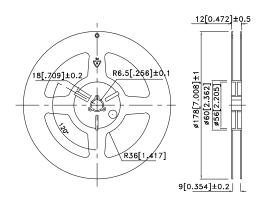
 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.

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

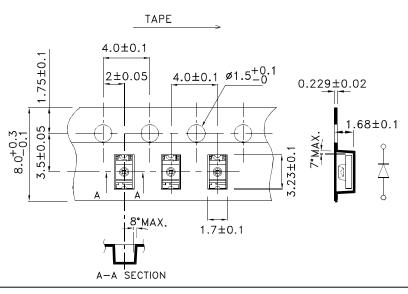
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)

4.4 1.6

Reel Dimension



Tape Dimensions (Units: mm)

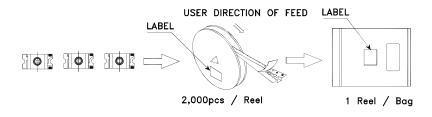


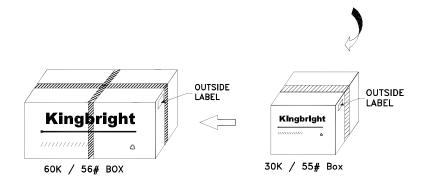
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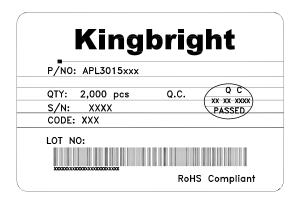
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PACKING & LABEL SPECIFICATIONS

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