

3.5x2.8mm SURFACE MOUNT LED LAMP

Blue

PRELIMINARY SPEC



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Part Number: AA3528QBC/G

Features

- Single color.
- Suitable for all SMT assembly and solder process.
- Available on tape and reel.
- Ideal for backlighting.
- Package: 1500pcs / reel.
- Moisture sensitivity level : level 4.
- RoHS compliant.

Description

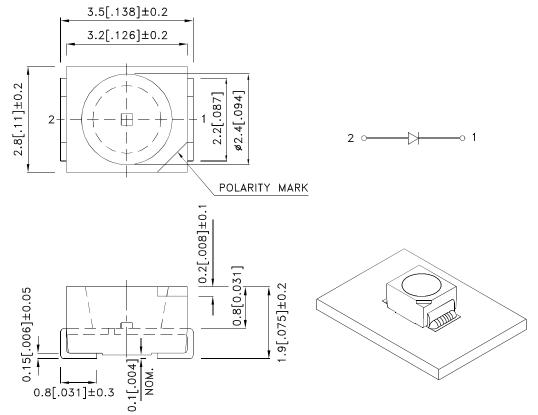
The Blue source color devices are made with InGaN Light Emitting Diode.

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



Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ±0.25(0.01") unless otherwise noted.
- 3. Specifications are subject to change without notice.
- 4. The device has a single mounting surface. The device must be mounted according to the specifications.





 SPEC NO: DSAJ8472
 REV NO: V.1
 DATE: SEP/29/2009
 PAGE: 1 OF 5

 APPROVED: WYNEC
 CHECKED: Allen Liu
 DRAWN: Q.Q.Zhu
 ERP: 1201005472

Selection Guide

| Part No. | Dice | Lens Type | lv (mcd) [2] @ 20mA | | Viewing Angle [1] |
|-------------|--------------|-------------|------------------------|------|----------------------|
| | | 2. | Min. | Тур. | 201/2 |
| AA3528QBC/G | Blue (InGaN) | WATER CLEAR | 180 | 370 | 120° |

- 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%.

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 | | 10 | uA | V _R =5V |

Notes:

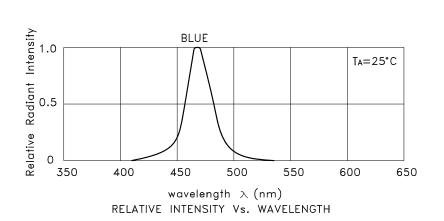
- 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

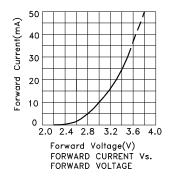
| Parameter | Blue | Units | |
|--------------------------|----------------|-------|--|
| Power dissipation | 120 | mW | |
| DC Forward Current | 30 | mA | |
| Peak Forward Current [1] | 150 | mA | |
| Reverse Voltage | 5 | V | |
| Operating Temperature | -40°C To +85°C | | |
| Storage Temperature |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

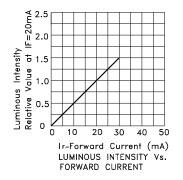
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

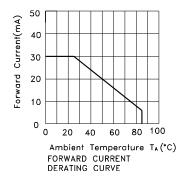
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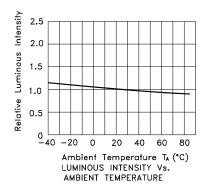


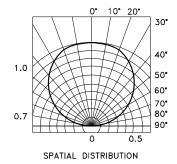
Blue AA3528QBC/G











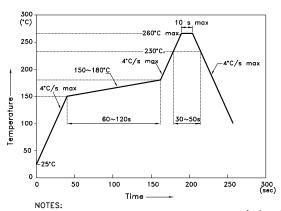
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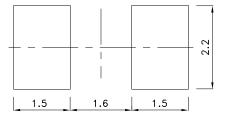
Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.

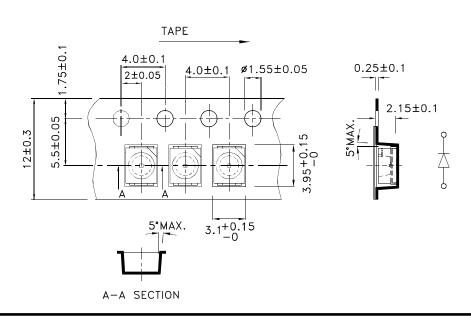


- 1.We recommend the reflow temperature 245°C(+/-5°C).The maximum soldering temperature should be limited to 260°C.
 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.
- 3. Number of reflow process shall be 2 times or less.

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



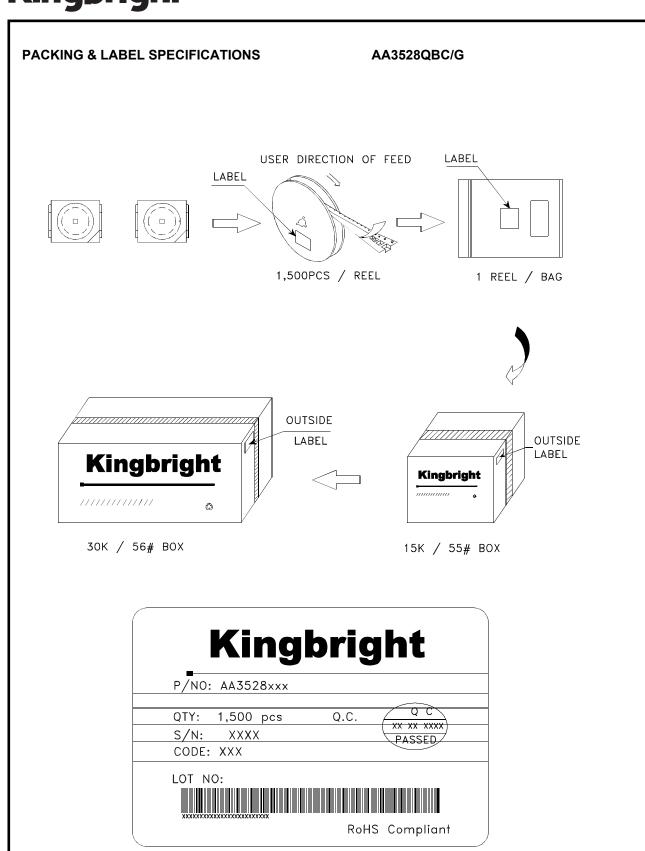
Tape Dimensions (Units: mm)



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