3.5 x2.8mm SMD CHIP LED LAMP

Part Number: APED3528QBC/D-F01 Blue



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

Features

- Single color.
- Suitable for all SMT assembly and solder process.
- · Ideal for backlighting.
- Available on tape and reel.
- Package: 500pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

Description

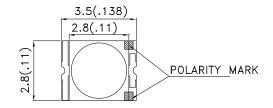
The Blue source color devices are made with AlGaInN on Sapphire Light Emitting Diode.

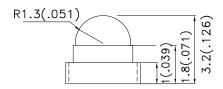
Static electricity and surge damage the LEDS.

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

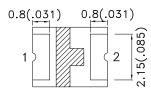
All devices, equipment and machinery must be electrically grounded.

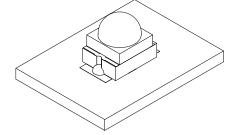
Package Dimensions











- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.2 (0.008")$ 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.





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Selection Guide

| Part No. | Dice | Lens Type | lv (mcd) [2] @ 20mA | | Viewing Angle [1] |
|-------------------|----------------|-------------|------------------------|------|----------------------|
| | | 21 | Min. | Тур. | 201/2 |
| APED3528QBC/D-F01 | Blue (AlGaInN) | WATER CLEAR | 280 | 500 | 40° |

- 1. 01/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline 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=20mA |
| λD [1] | Dominant Wavelength | Blue | 470 | | nm | IF=20mA |
| Δλ1/2 | Spectral Line Half-width | Blue | 25 | | nm | I=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.

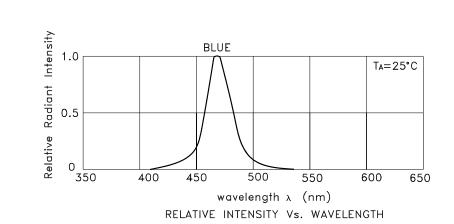
Absolute Maximum Ratings at TA=25°C

| 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 | -40°C To +85°C | | | | | |

Note:

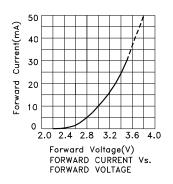
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

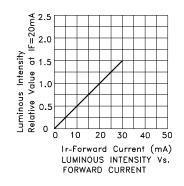
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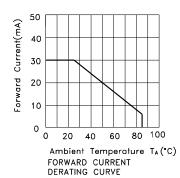


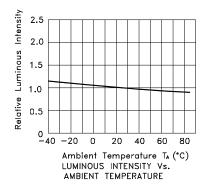
Blue

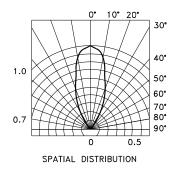
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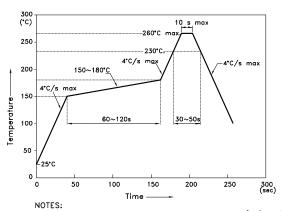
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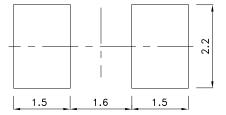
Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.

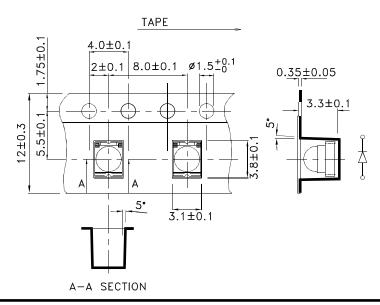


1.We recommend the reflow temperature $245^{\circ}C(+/-5^{\circ}C)$.The maximum soldering temperature should be limited to 260°C. 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.
 3.Number of reflow process shall be 2 times or less.

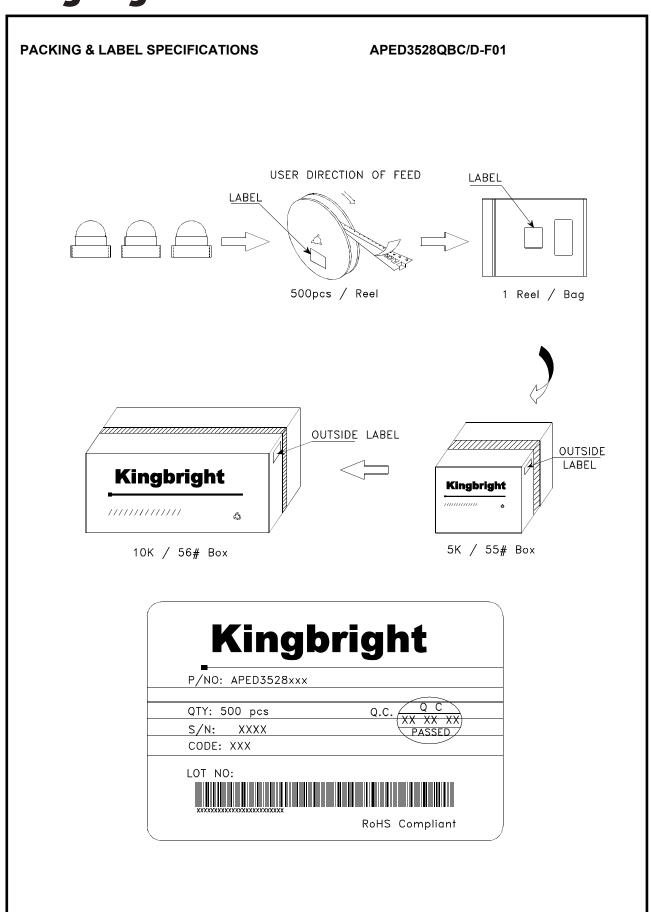
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



Tape Dimensions (Units : mm)



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