

# Kingbright

## SURFACE MOUNT DISPLAY



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

P/N: ACDA56-41PBWA/A-F01

BLUE

## PRELIMINARY SPEC

## Features

- 0.56INCH DIGIT HEIGHT.
- LOW CURRENT OPERATION.
- EXCELLENT CHARACTER APPEARANCE.
- I.C. COMPATIBLE.
- MECHANICALLY RUGGED.
- GRAY FACE,WHITE SEGMENT.
- PACKAGE:200PCS/ REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 4.
- RoHS COMPLIANT

### Description

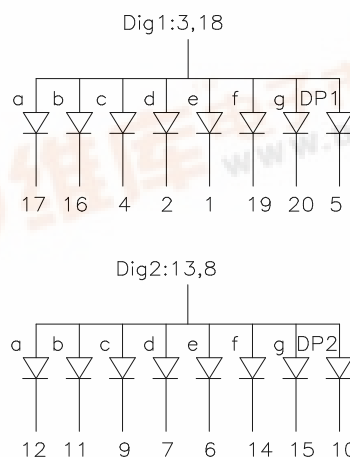
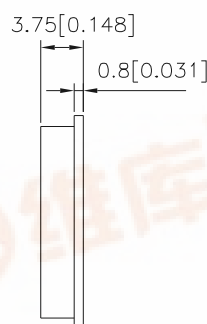
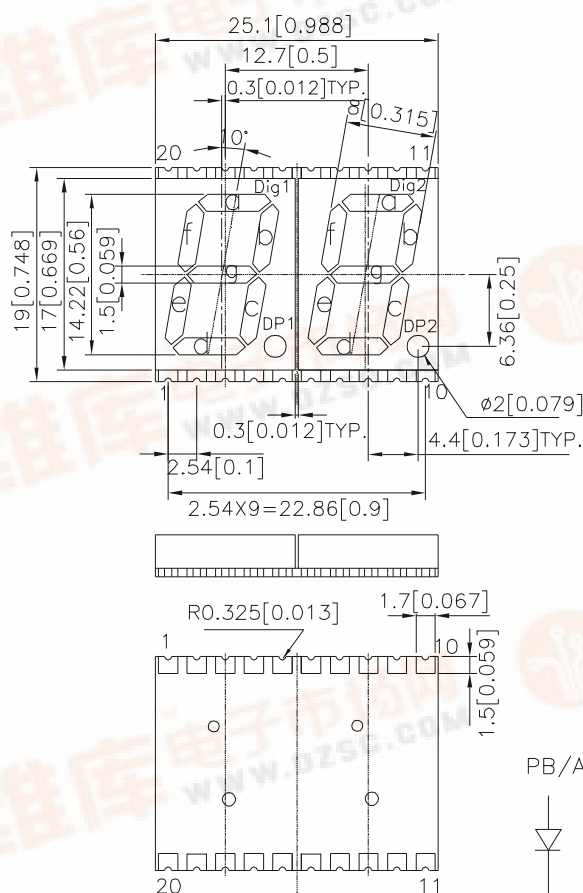
The Blue source color devices are made with InGaN on SiC Light Emitting Diode.

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 & Internal Circuit Diagram



Notes:

1. All dimensions are in millimeters (inches), Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.  
2. Specifications are subject to change without notice.  
3. The gap between the reflector and PCB shall not exceed 0.25mm.

## Selection Guide

| Part No.            | Dice         | Lens Type      | Iv (ucd) [1]<br>@ 10mA |      | Description                     |
|---------------------|--------------|----------------|------------------------|------|---------------------------------|
|                     |              |                | Min.                   | Typ. |                                 |
| ACDA56-41PBWA/A-F01 | BLUE (InGaN) | WHITE DIFFUSED | 1900                   | 9000 | Common Anode, Rt. Hand Decimal. |

Note:

1.Luminous Intensity/ Luminous Flux: +/-15%.

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

| Symbol                | Parameter                | Device | Typ. | Max. | Units | Test Conditions |
|-----------------------|--------------------------|--------|------|------|-------|-----------------|
| $\lambda_{peak}$      | Peak Wavelength          | Blue   | 468  |      | nm    | IF=20mA         |
| $\lambda_D[1]$        | Dominant Wavelength      | Blue   | 470  |      | nm    | IF=20mA         |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | Blue   | 21   |      | nm    | IF=20mA         |
| C                     | Capacitance              | Blue   | 100  |      | pF    | VF=0V;f=1MHz    |
| VF[2]                 | Forward Voltage          | Blue   | 3.3  | 3.8  | V     | IF=20mA         |
| IR                    | Reverse Current          | Blue   |      | 10   | uA    | VR = 5V         |

Notes:

1.Wavelength: +/-1nm

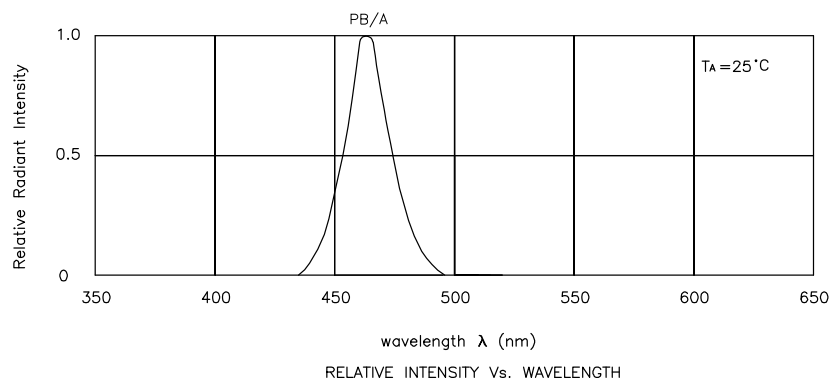
2.Forward Voltage: +/-0.1V

## Absolute Maximum Ratings at TA=25°C

| Parameter                     | Blue           | Units |
|-------------------------------|----------------|-------|
| Power dissipation             | 114            | mW    |
| DC Forward Current            | 30             | mA    |
| Peak Forward Current [1]      | 100            | mA    |
| Reverse Voltage               | 5              | V     |
| Operating/Storage Temperature | -40°C To +85°C |       |

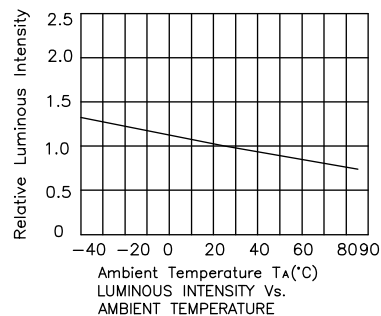
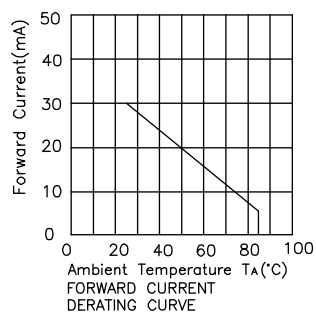
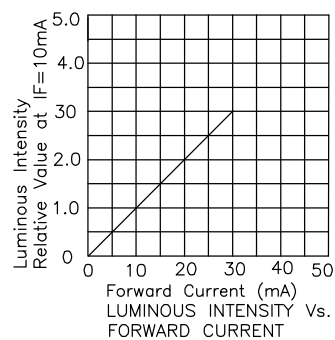
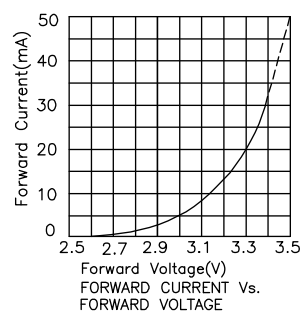
Note:

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



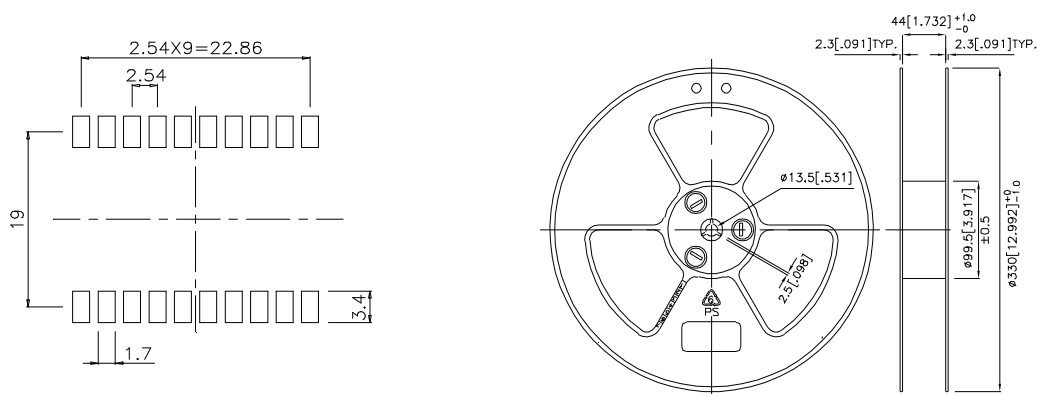
Blue

ACDA56-41PBWA/A-F01

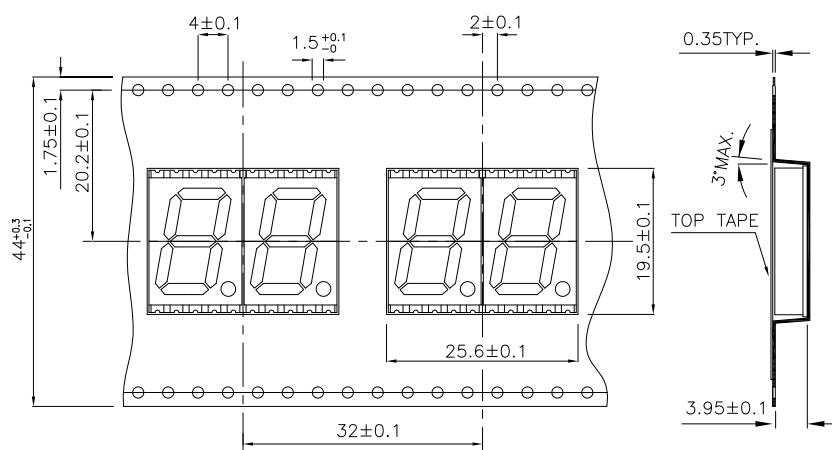


1. We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.
2. Don't cause stress to the epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.

## Reel Dimension

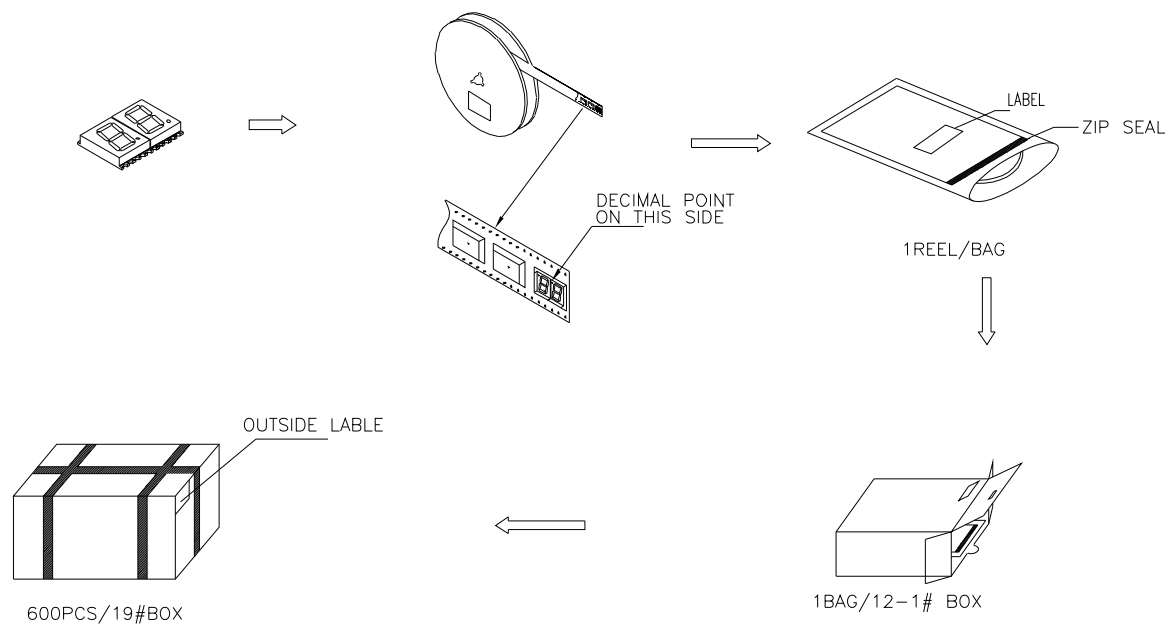


TAPE  $\longrightarrow$

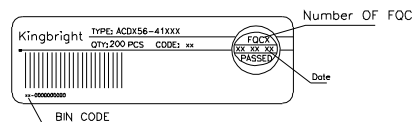


## PACKING & LABEL SPECIFICATIONS

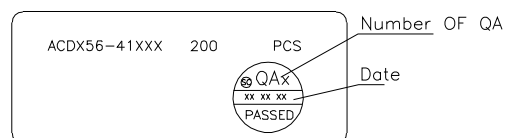
ACDA56-41PBWA/A-F01



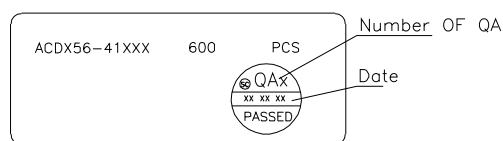
Inside LABEL Paste On The Tape-pipe



Outside LABEL Paste On The BAG



Outside LABEL Paste On The 19#Box



Outside LABEL Paste On The 12-1#Box

