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Stocking Distributor

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[Kingbright](#)
[ACDC56-41QBWA/D-F01](#)

For any questions, you can email us directly:

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SURFACE MOUNT DISPLAY



ATTENTION
 OBSERVE PRECAUTIONS
 FOR HANDLING
 ELECTROSTATIC
 DISCHARGE
 SENSITIVE
 DEVICES

Part Number: ACDC56-41QBWA/D-F01 Blue

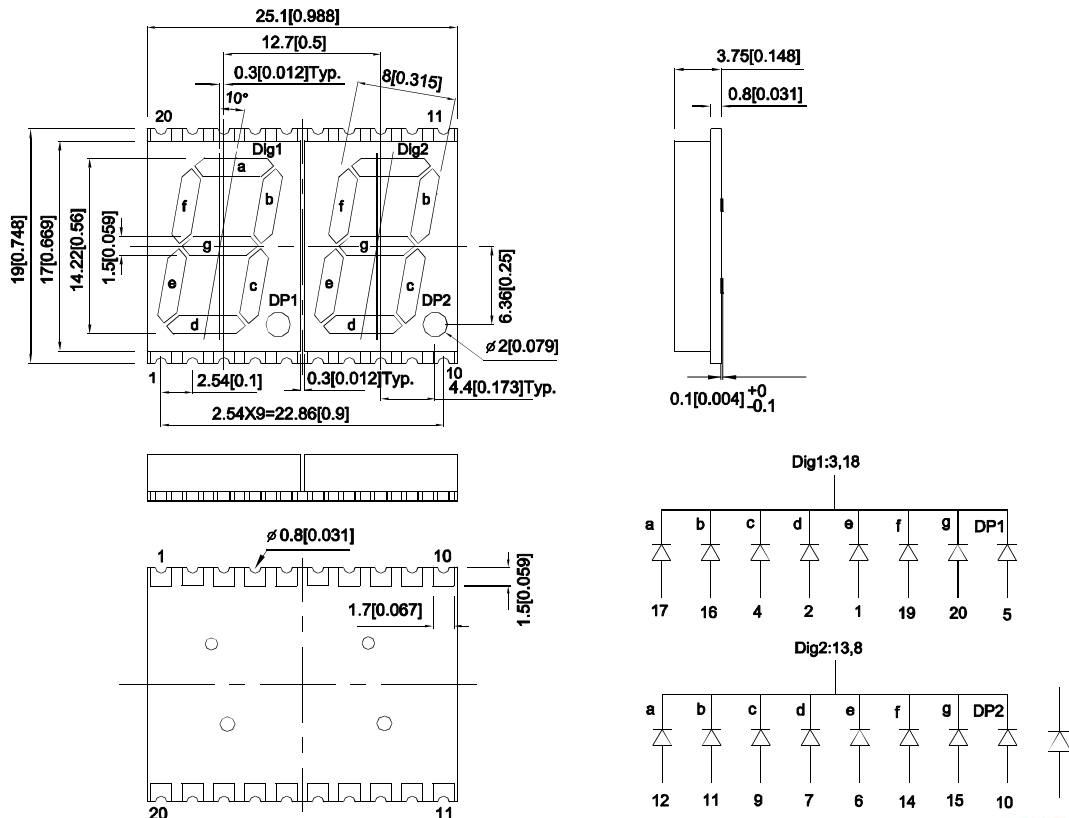
Features

- 0.56 inch digit height.
- Low current operation.
- Excellent character appearance.
- Mechanically rugged.
- Gray face, white segment.
- Package: 200pcs/ reel.
- Moisture sensitivity level : level 2a.
- 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 anti-electrostatic glove when handling the LEDs.
- All devices, equipments and machineries 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. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
3. The gap between the reflector and PCB shall not exceed 0.25mm.



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Selection Guide

Part No.	Emitting Color (Material)	Lens Type	Iv (ucd) [1] @ 10mA		Description
			Min.	Typ.	
ACDC56-41QBWA/D-F01	Blue (InGaN)	White Diffused	5600	15000	Common Cathode, Rt. Hand Decimal

Notes:

- 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	Emitting Color	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Blue	460		nm	I _F =10mA
λ_D [1]	Dominant Wavelength	Blue	465		nm	I _F =10mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Blue	25		nm	I _F =10mA
C	Capacitance	Blue	100		pF	V _F =0V;f=1MHz
V _F [2]	Forward Voltage	Blue	3.0	4.0	V	I _F =10mA
I _R	Reverse Current	Blue		50	uA	V _R =5V

Notes:

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

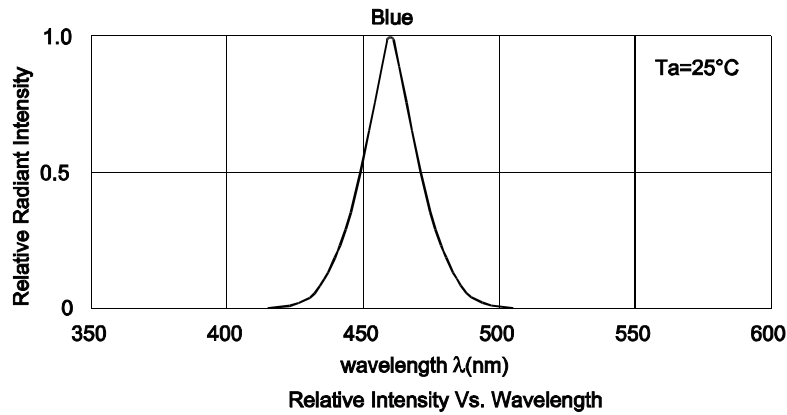
Absolute Maximum Ratings at TA=25°C

Parameter	Values	Units
Power dissipation	120	mW
DC Forward Current	30	mA
Peak Forward Current [1]	150	mA
Reverse Voltage	5	V
Electrostatic Discharge Threshold (HBM)	250	V
Operating / Storage Temperature	-40°C To +85°C	

Note:

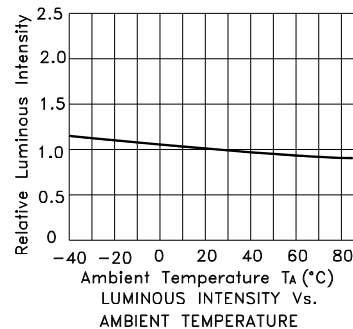
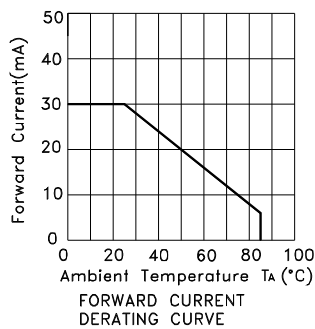
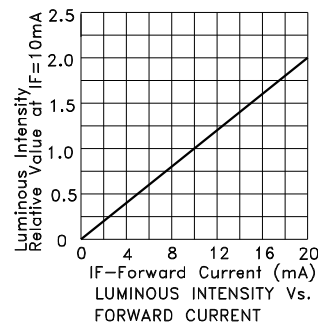
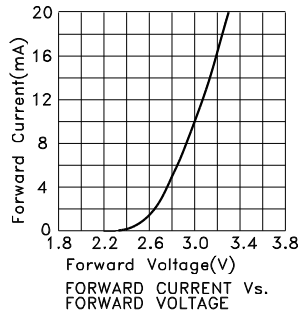
- 1/10 Duty Cycle, 0.1ms Pulse Width.

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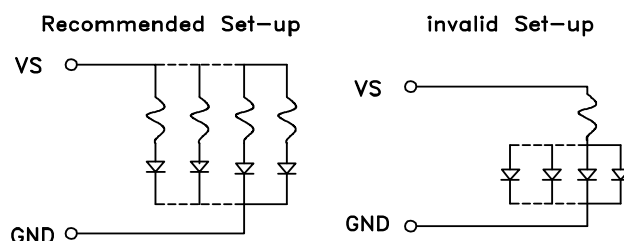
Blue

ACDC56-41QBWA/D-F01



CIRCUIT DESIGN NOTES

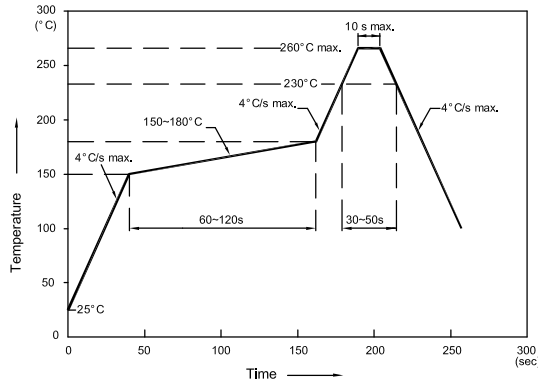
1. Protective current-limiting resistors may be necessary to operate the Displays.
2. LEDs mounted in parallel should each be placed in series with its own current-limiting resistor.



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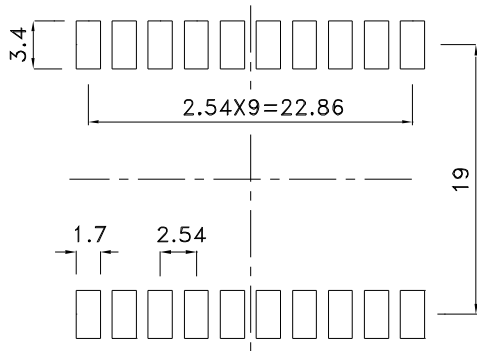
Reflow Soldering Profile For Lead-free SMT Process.



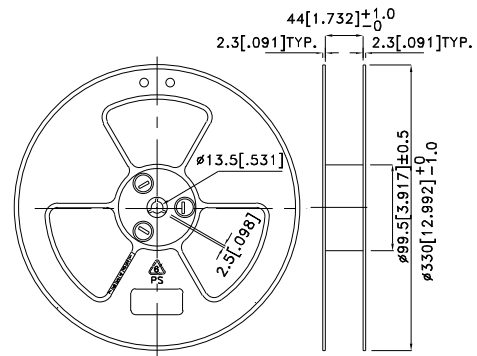
NOTES:

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.

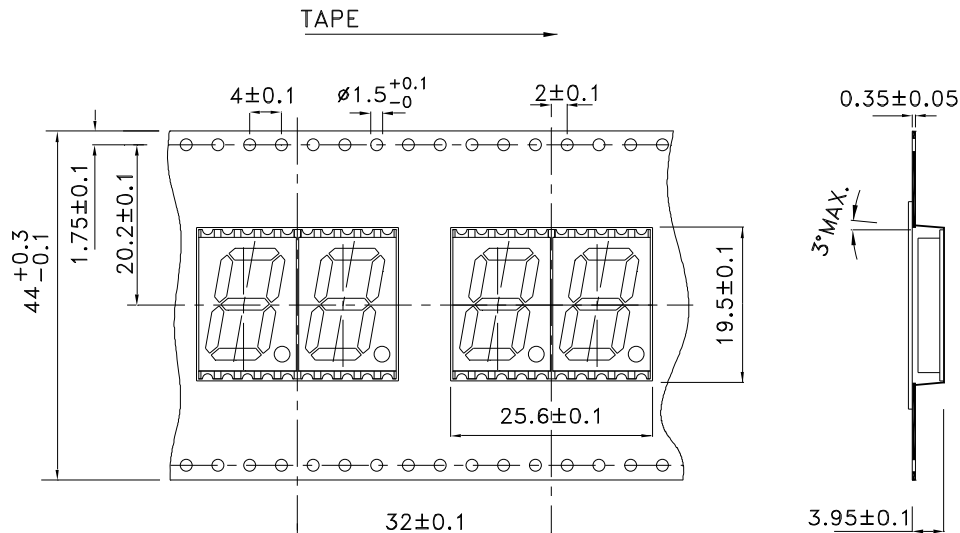
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.15)



Reel Dimension



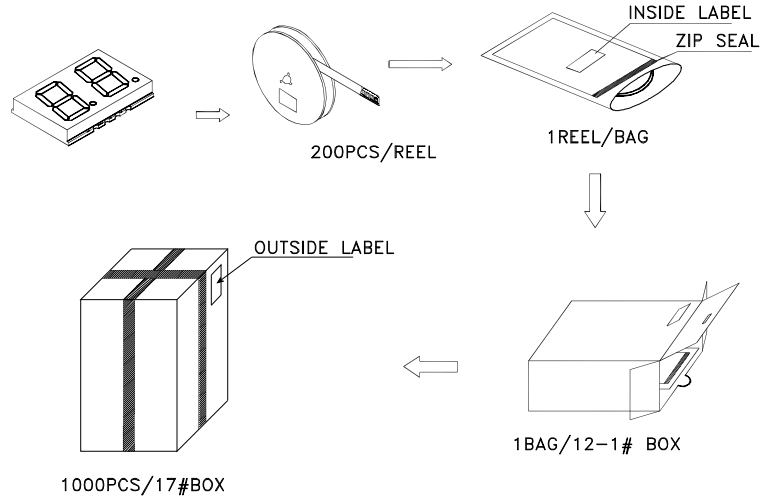
Tape Specifications (Units : mm)



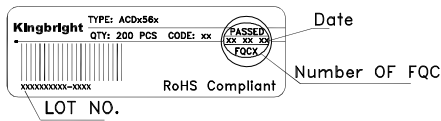
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PACKING & LABEL SPECIFICATIONS

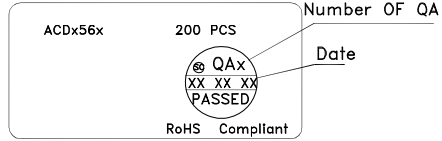
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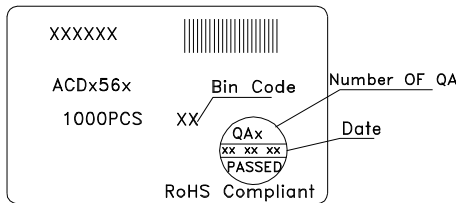
Inside LABEL On Tape



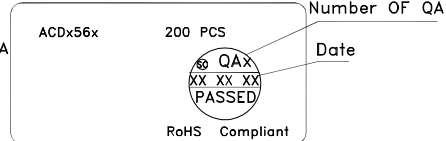
Outside LABEL On BAG



Outside LABEL On 17#Box



Outside LABEL On 12-1#Box



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