

SURFACE MOUNT DISPLAY

Part Number: ACDA02-41SEKWA-F01

Super Bright Orange

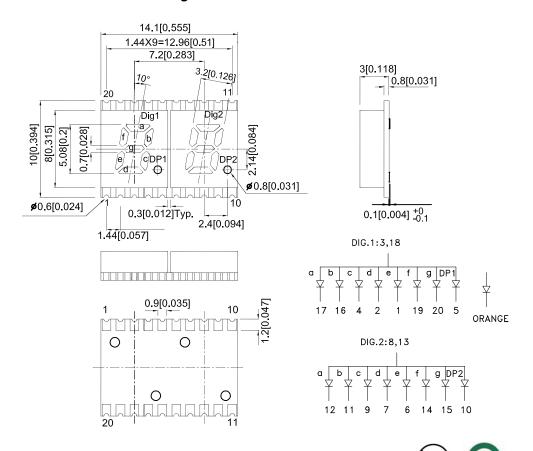
Features

- 0.2 inch digit height.
- Low current operation.
- Excellent character appearance.
- Mechanically rugged.
- Package:300pcs/reel.
- Gray face, white segment.
- Moisture sensitivity level : level 2a.
- RoHS compliant.

Description

The Super Bright Orange device is made with AlGaInP (on GaAs substrate) light emitting diode chip.

Package Dimensions& Internal Circuit Diagram



Notes

- 1. All dimensions are in millimeters (inches), Tolerance is ±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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 APPROVED: Wynec
 CHECKED: Joe Lee
 DRAWN: M.Liu
 ERP: 1352000351

Selection Guide

| Part No. | Emitting Color (Material) | Lens Type | Iv (ucd) [1] @ 10mA | | Description |
|--------------------|-------------------------------|----------------|------------------------|--------|------------------------------------|
| | | | Min. | Тур. | |
| ACDA02-41SEKWA-F01 | Super Bright Orange (AlGaInP) | White Diffused | 21000 | 37000 | Common Anode, Rt. Hand Decimal. |
| | | | *5600 | *12000 | |

Note:

Electrical / Optical Characteristics at TA=25°C

| Symbol | Parameter | Emitting Color | Тур. | Max. | Units | Test Conditions | | |
|--------|--------------------------|---------------------|------|------|-------|-----------------|--|--|
| λpeak | Peak Wavelength | Super Bright Orange | 610 | | nm | IF=10mA | | |
| λD [1] | Dominant Wavelength | Super Bright Orange | 601 | | nm | IF=10mA | | |
| Δλ1/2 | Spectral Line Half-width | Super Bright Orange | 29 | | nm | IF=10mA | | |
| С | Capacitance | Super Bright Orange | 15 | | pF | VF=0V;f=1MHz | | |
| VF [2] | Forward Voltage | Super Bright Orange | 2 | 2.5 | V | IF=10mA | | |
| lr | Reverse Current | Super Bright Orange | | 10 | uA | VR=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

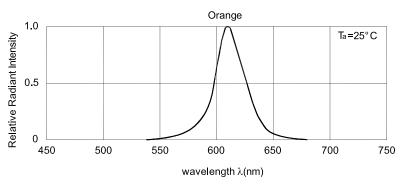
| Parameter | Values | Units | |
|---------------------------------|----------------|-------|--|
| Power dissipation | 75 | mW | |
| DC Forward Current | 30 | mA | |
| Peak Forward Current [1] | 195 | mA | |
| Reverse Voltage | 5 | V | |
| Operating / Storage Temperature | -40°C To +85°C | | |

Note:

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

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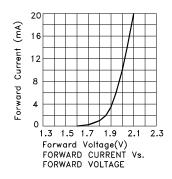
^{1.}Luminous intensity/ luminous Flux: +/-15%.
*Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

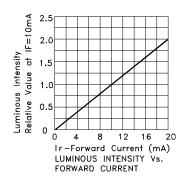


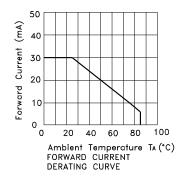
Relative Intensity Vs. Wavelength

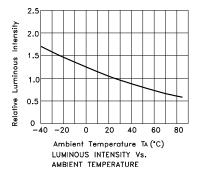
Super Bright Orange

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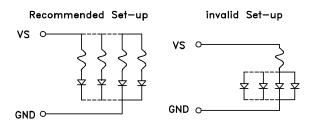






CIRCUIT DESIGN NOTES

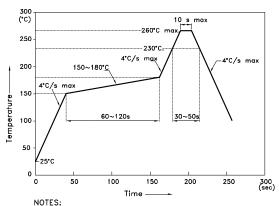
- 1.Protective current—limiting resistors may be necessary to operate the Displays.
- 2.LEDs mounted in parallel should each be placed in series with its own current-limiting resistor.



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Reflow Soldering Profile For Lead-free SMT Process.



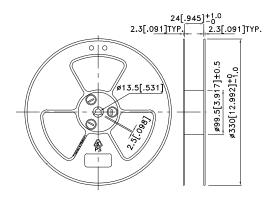
- NOTES:

 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)

1.44X9=12.96 0 0.9

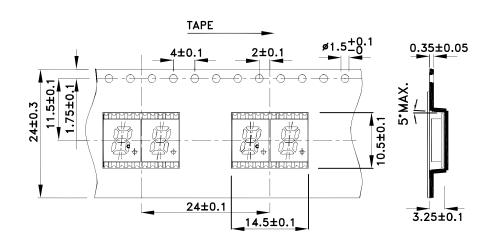
Reel Dimension



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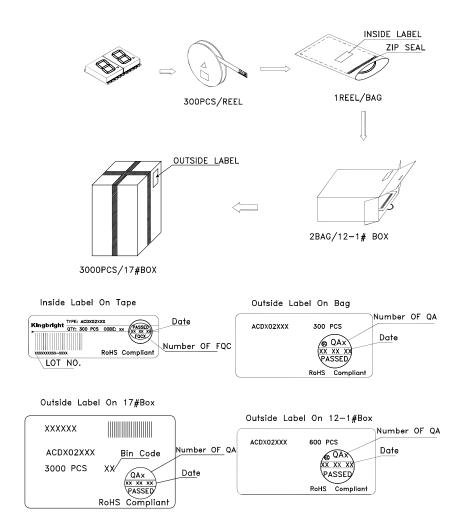
Tape Specifications (Units: mm)



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PACKING & LABEL SPECIFICATIONS

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