

SURFACE MOUNT DISPLAY

Part Number: ACDC56-41SEKWA-F01

Super Bright Orange

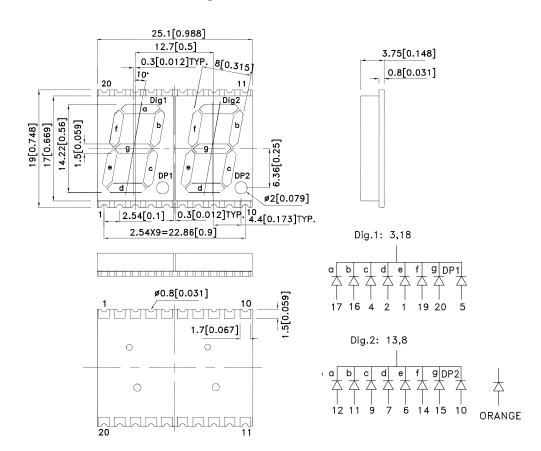
Features

- 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.

Description

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

Package Dimensions& Internal Circuit Diagram





- 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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Selection Guide

| Part No. | Dice | Lens Type | lv (ucd) [1] @ 10mA | | Description |
|--------------------|-------------------------------|---------------------------------------|------------------------|--------|------------------------------------|
| | | | Min. | Тур. | |
| ACDC56-41SEKWA-F01 | Super Pright Orange (AlCalaD) | right Orange (AlGaInP) White Diffused | 31000 | 78000 | Common Cathode,Rt. Hand Decimal |
| ACDC50-413ERWA-F01 | Super Bright Grange (AlGaine) | | *14000 | *23000 | |

Note:

Electrical / Optical Characteristics at TA=25°C

| Symbol | Parameter | Device | Тур. | Max. | Units | Test Conditions |
|--------|--------------------------|---------------------|------|------|-------|--------------------|
| λpeak | Peak Wavelength | Super Bright Orange | 610 | | nm | IF=20mA |
| λD [1] | Dominant Wavelength | Super Bright Orange | 601 | | nm | IF=20mA |
| Δλ1/2 | Spectral Line Half-width | Super Bright Orange | 29 | | nm | IF=20mA |
| С | Capacitance | Super Bright Orange | 15 | | pF | VF=0V;f=1MHz |
| VF [2] | Forward Voltage | Super Bright Orange | 2.1 | 2.5 | V | IF=20mA |
| lr | Reverse Current | Super Bright Orange | | 10 | uA | V _R =5V |

- 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

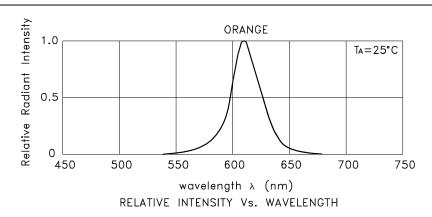
| Parameter | Super Bright Orange | Units | |
|---------------------------------|---------------------|-------|--|
| Power dissipation | 75 | mW | |
| DC Forward Current | 30 | mA | |
| Peak Forward Current [1] | 195 | mA | |
| Reverse Voltage | 5 | V | |
| Operating / Storage Temperature | -40°C To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

Note:

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

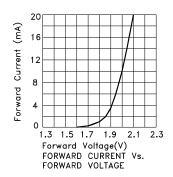
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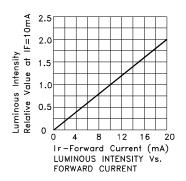
^{1.} Luminous intensity/ luminous Flux: +/-15%.
*Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

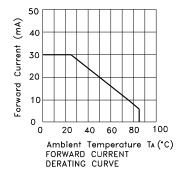


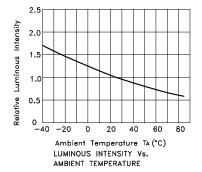
Super Bright Orange

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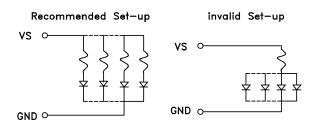






CIRCUIT DESIGN NOTES

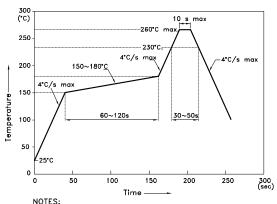
- 1.Protective current—limiting resistors may be necessary to operate the Displays.
- 2.LEDs mounted in parallel should each be placed in series with its own current—limiting resistor.



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Reflow Soldering Profile For Lead-free SMT Process.



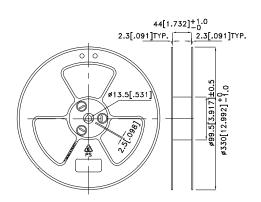
- NOTES:

 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)

2.54X9 = 22.862.54 1.7

Reel Dimension



Tape Specifications (Units: mm)

TAPE $\emptyset 1.5^{+0.1}_{-0}$ 2±0.1 4±0.1 0.35±0.05 1.75±0.1 $20.2\pm0.$ 9.5 ± 0.1 25.6±0.1 -o-o-o|o-o-o-o-o-o|o-o-o 3.95±0.1 32 ± 0.1

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PACKING & LABEL SPECIFICATIONS ACDC56-41SEKWA-F01 INSIDE LABEL ZIP SEAL 1REEL/BAG 200PCS/REEL OUTSIDE LABEL 1BAG/12# BOX 1000PCS/17#BOX Inside LABEL On Tape Outside LABEL On BAG Number OF QA Kingbright TYPE: ACDx58x OTY: 200 PCS CODE: xx FASSED XX XX XX ACDx56x 200 PCS Date QAX RoHS Compliant LOT NO. Outside LABEL On 17#Box Outside LABEL On 12#Box xxxxxx Number OF QA ACDx56x 200 PCS lumber OF QA ACDx56x Bin Code QAX

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PASSED RoHS Compliant

1000PCS

1. The information included in this document reflects representative usage scenarios and is intended for technical reference only.

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- 2. The part number, type, and specifications mentioned in this document are subject to future change and improvement without notice. Before production usage customer should refer to the latest datasheet for the updated specifications.
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