

#### SURFACE MOUNT DISPLAY

Part Number: ACPSC04-41SEKWA

Super Bright Orange

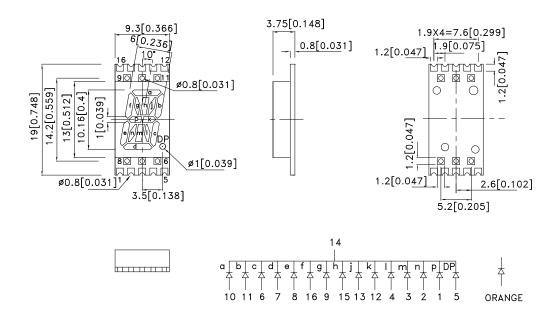
#### **Features**

- 0.4 inch character height.
- Low current operation.
- High contrast and light output.
- Categorized for luminous intensity.
- Mechanically rugged.
- Gray face, white segment.
- Package: 400pcs / 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**







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

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#### **Selection Guide**

Part No.	Dice	Lens Type	lv (ucd) [1] @ 10mA		Description
			Min.	Тур.	2333.1643
ACPSC04-41SEKWA	Super Bright Orange (AlGaInP)	White Diffused	21000	44000	Common Cathode, Rt. Hand Decimal.
			*5600	*13000	

#### 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 <sub>R</sub> =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.

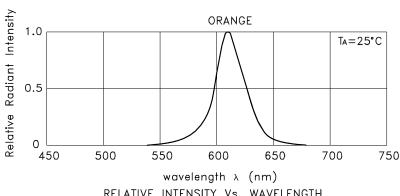
#### Absolute Maximum Ratings at TA=25°C

Parameter	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		

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<sup>1.</sup> Luminous intensity/ luminous Flux: +/-15%.
\*Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

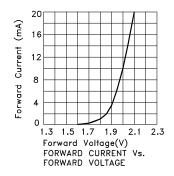
Note: 1. 1/10 Duty Cycle, 0.1ms Pulse Width.

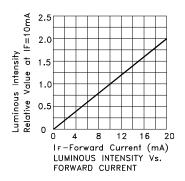


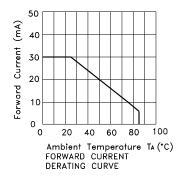
RELATIVE INTENSITY Vs. WAVELENGTH

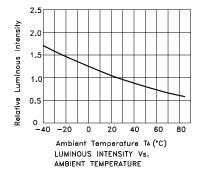
### **Super Bright Orange**

#### ACPSC04-41SEKWA



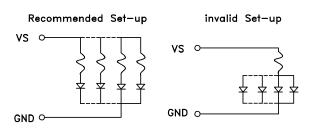






#### CIRCUIT DESIGN NOTES

- 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.



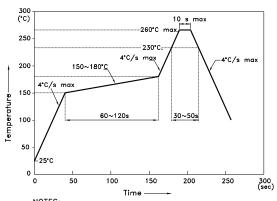
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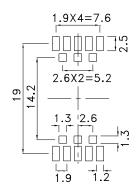
Reflow Soldering Profile For Lead-free SMT Process.

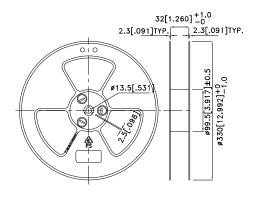


- NOTES: 1.We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C. 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.
   3.Number of reflow process shall be 2 times or less.

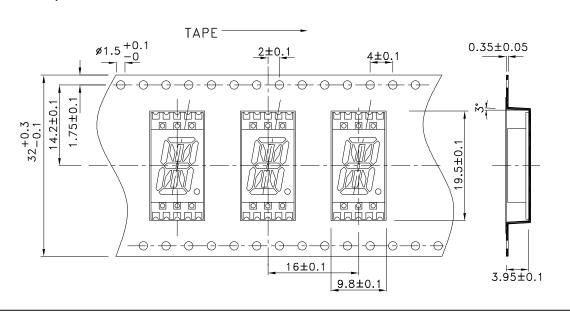
**Recommended Soldering Pattern** (Units: mm; Tolerance: ± 0.15)

#### **Reel Dimension**





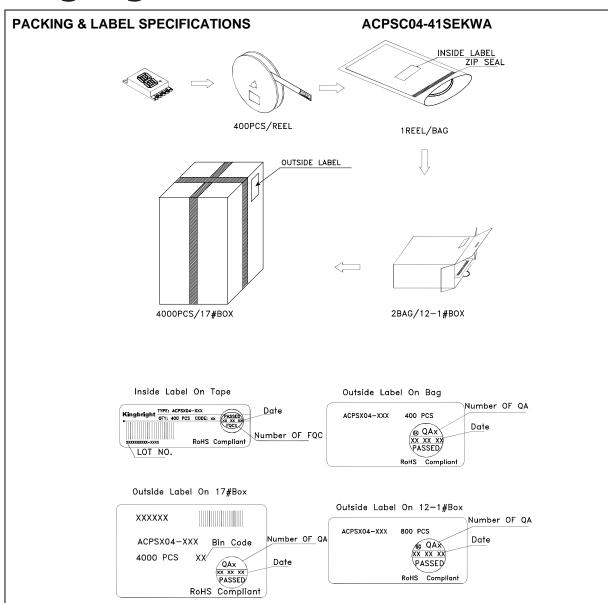
### **Tape Specifications** (Units: mm)



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