

### SURFACE MOUNT DISPLAY

Part Number: ACDA02-41SYKWA-F01

Super Bright Yellow

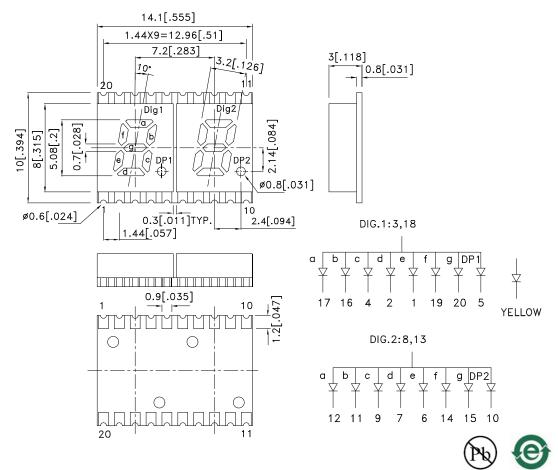
### **Features**

- 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 Yellow 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	Dice Lens Type		d) [1] 0mA	Description
			Min.	Тур.	
ACDA02 418VKWA E01	CDA02-41SYKWA-F01 Super Bright Yellow (AlGaInP)	White Diffused	21000	50000	Common Anode, Rt. Hand Decimal.
ACDA02-4131KWA-F01			*5600	*15000	

### Note:

- 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	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Yellow	590		nm	I=20mA
λD [1]	Dominant Wavelength	Super Bright Yellow	590		nm	I=20mA
Δλ1/2	Spectral Line Half-width	Super Bright Yellow	20		nm	IF=20mA
С	Capacitance	Super Bright Yellow	20		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Super Bright Yellow	2.0	2.5	V	IF=20mA
lR	Reverse Current	Super Bright Yellow		10	uA	V <sub>R</sub> =5V

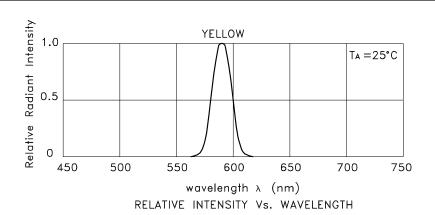
- Notes: 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.
- 3. Wavelength value is traceable to the CIE127-2007 compliant national standards.

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

Parameter	Super Bright Yellow	Units			
Power dissipation	75	mW			
DC Forward Current	30	mA			
Peak Forward Current [1]	175	mA			
Reverse Voltage	5	V			
Operating / Storage Temperature	-40°C To +85°C				

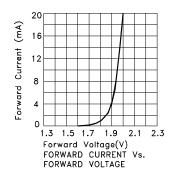
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

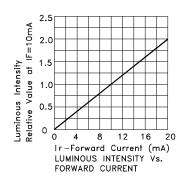
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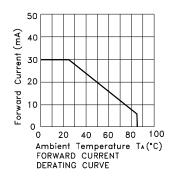


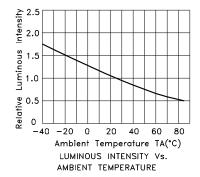
### **Super Bright Yellow**

### ACDA02-41SYKWA-F01



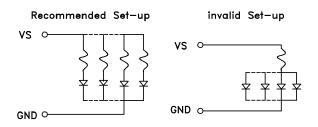






### CIRCUIT DESIGN NOTES

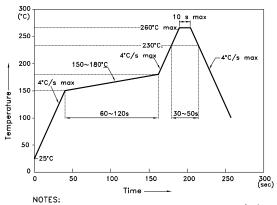
- 1.Protective current—limiting resistors may be necessary to operate the Displays.
- 2.LEDs mounted in parallel should each be placed in series with its own current—limiting resistor.



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### ACDA02-41SYKWA-F01

Reflow Soldering Profile For Lead-free SMT Process.



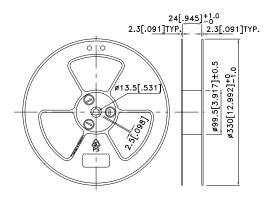
- NOTES:

  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.

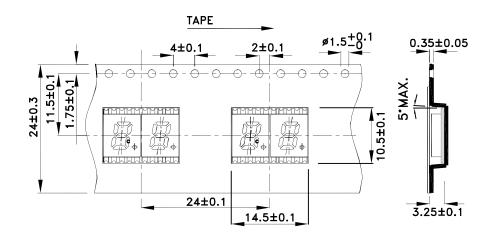
### **Recommended Soldering Pattern** (Units: mm; Tolerance: ± 0.15)

# L-- 1.44 1.44X9=12.96

### **Reel Dimension**



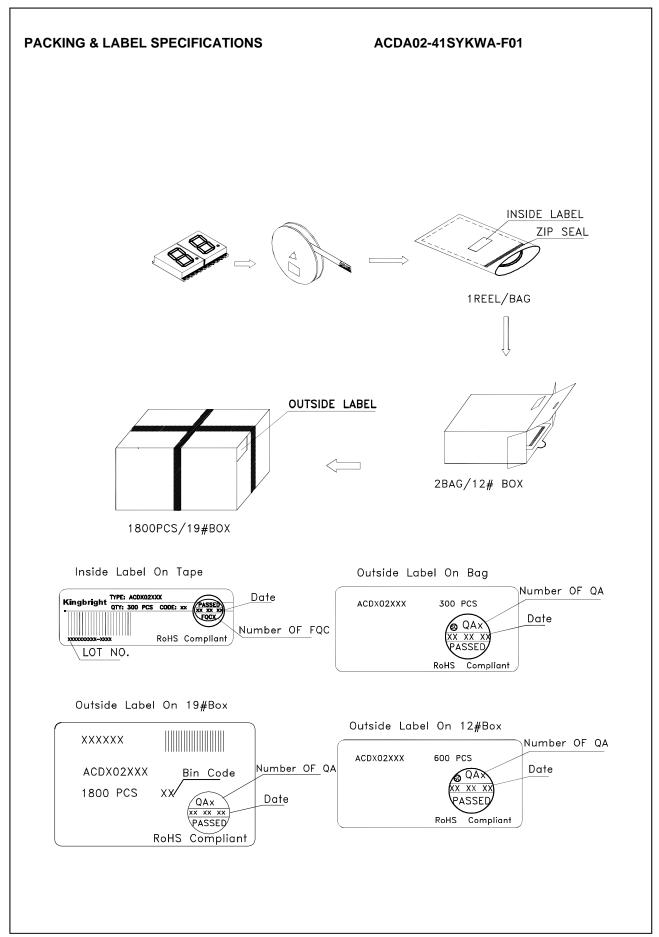
### **Tape Specifications** (Units: mm)



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