

# **Excellent Integrated System Limited**

Stocking Distributor

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Kingbright ACSA03-41SYKWA-F01

For any questions, you can email us directly: sales@integrated-circuit.com



## SURFACE MOUNT DISPLAY

Part Number: ACSA03-41SYKWA-F01

Super Bright Yellow

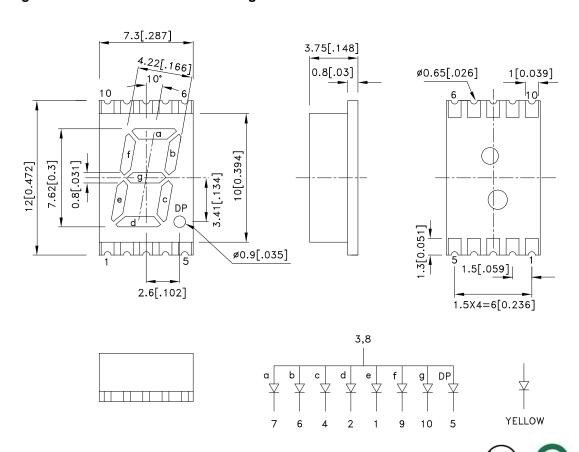
### **Features**

- 0.3 inch digit height.
- Low current operation.
- Excellent character appearance.
- Mechanically rugged.
- Gray face, white segment.
- Package: 550pcs / reel.
- 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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# **Distributor of Kingbright: Excellent Integrated System Limited**

Datasheet of ACSA03-41SYKWA-F01 - DISPLAY 590NM YLW 1DIG 0.3" SMD Contact us: sales@integrated-circuit.com Website: www.integrated-circuit.com

# Kingbright

# **Selection Guide**

Part No.	Dice	Lens Type	lv (ucd) [1] @ 10mA		Description
			Min.	Тур.	2000
ACSA03-41SYKWA-F01	Super Bright Yellow (AlGaInP)	White Diffused	21000	36000	Common Anode, Rt. Hand Decimal.
			*5600	*13000	

### Note:

# Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Yellow	590		nm	IF=20mA
λD [1]	Dominant Wavelength	Super Bright Yellow	590		nm	IF=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
IR	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.
- 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 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					

### Note:

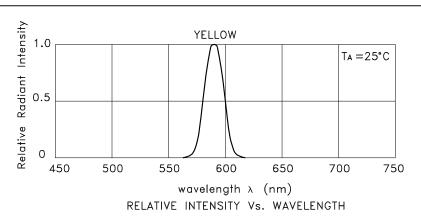
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

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<sup>1.</sup> Luminous intensity/ luminous Flux: +/-15%.

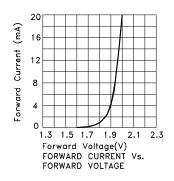
<sup>\*</sup>Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

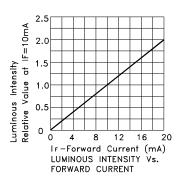


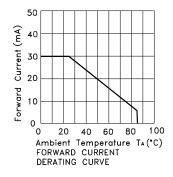


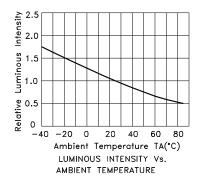
# **Super Bright Yellow**

# ACSA03-41SYKWA-F01



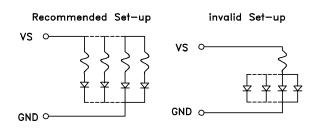






# CIRCUIT DESIGN NOTES

- 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.

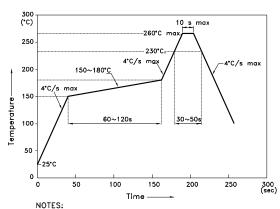


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# ACSA03-41SYKWA-F01

Reflow Soldering Profile For Lead-free SMT Process.



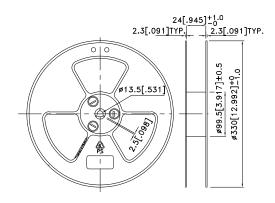
- 1.We recommend the reflow temperature 245°C(+/-5°C).The maximum soldering temperature should be limited to 260°C. 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.

  3.Number of reflow process shall be 2 times or less.

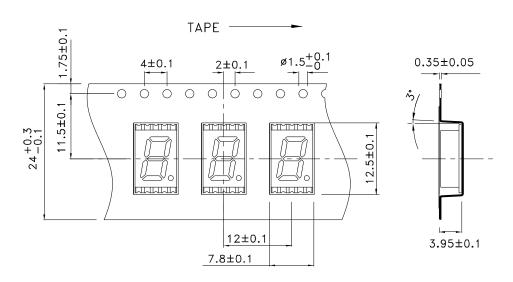
# **Recommended Soldering Pattern** (Units: mm; Tolerance: ± 0.15)

# 1.5X4=6

### **Reel Dimension**

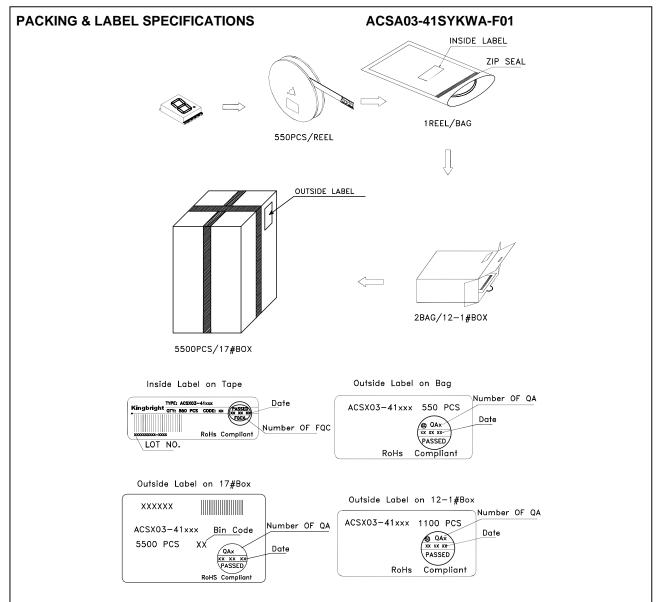


# **Tape Specifications** (Units: mm)



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