

### SURFACE MOUNT DISPLAY

Part Number: ACSA03-41CGKWA-F01 Green

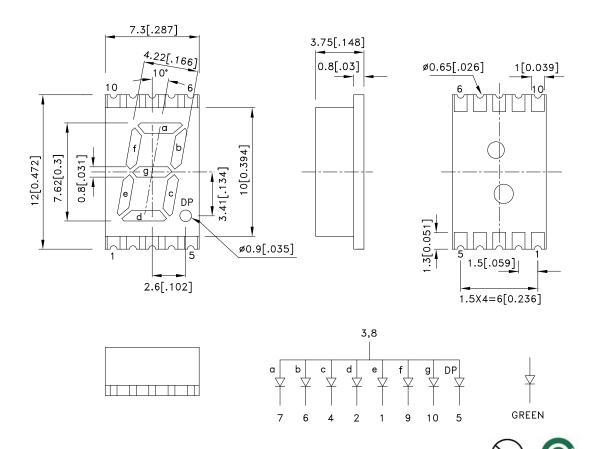
### **Features**

- 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 Green source color devices are made with AlGaInP on GaAs substrate Light Emitting Diode.

### **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.	2000	
ACSA03-41CGKWA-F01	Green (AlGaInP)	White Diffused	3600	12000	Common Anode, Rt.	
7100/100 41001111111111111111111111111111	, d. d	TTIMO BINGGO	*1400	*3100	Hand Decimal.	

- 1. 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	Green	574		nm	IF=20mA
λD [1]	Dominant Wavelength	Green	570		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Green	20		nm	IF=20mA
С	Capacitance	Green	15		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Green	2.1	2.5	V	IF=20mA
IR	Reverse Current	Green		10	uA	V <sub>R</sub> =5V

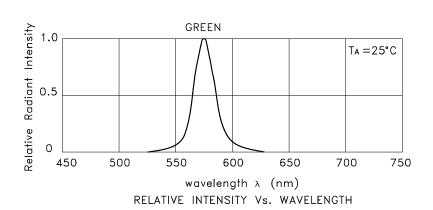
- NWavelength: +/-1nm.
   Forward Voltage: +/-0.1V.
   Wavelength value is traceable to the CIE127-2007 compliant national standards.

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

Parameter	Green	Units	
Power dissipation	75	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	150	mA	
Reverse Voltage	5	V	
Operating / Storage Temperature	-40°C To +85°C		

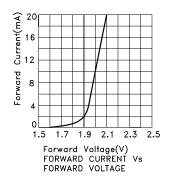
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

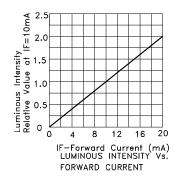
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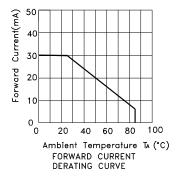


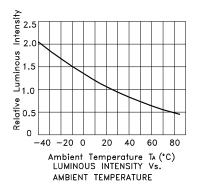
### Green

### ACSA03-41CGKWA-F01



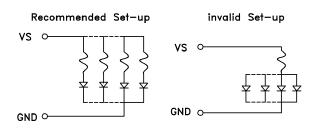






### CIRCUIT DESIGN NOTES

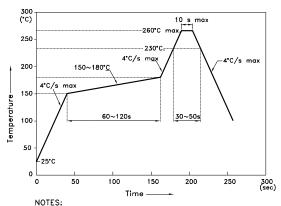
- 1.Protective current—limiting resistors may be necessary to operate the Displays.
- 2.LEDs mounted in parallel should each be placed in series with its own current—limiting resistor.



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### ACSA03-41CGKWA-F01

Reflow Soldering Profile For Lead-free SMT Process.



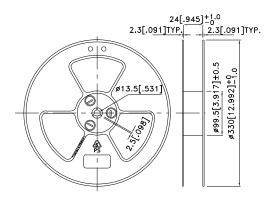
- NOTES:

  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.

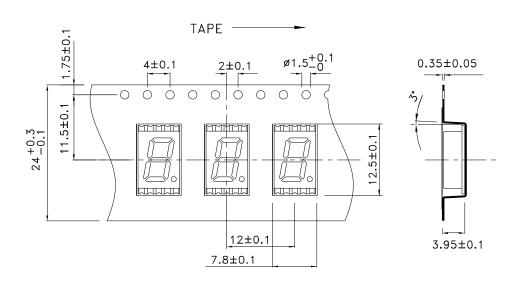
### **Recommended Soldering Pattern** (Units: mm; Tolerance: ± 0.15)

# 1.5X4=6 12

### **Reel Dimension**

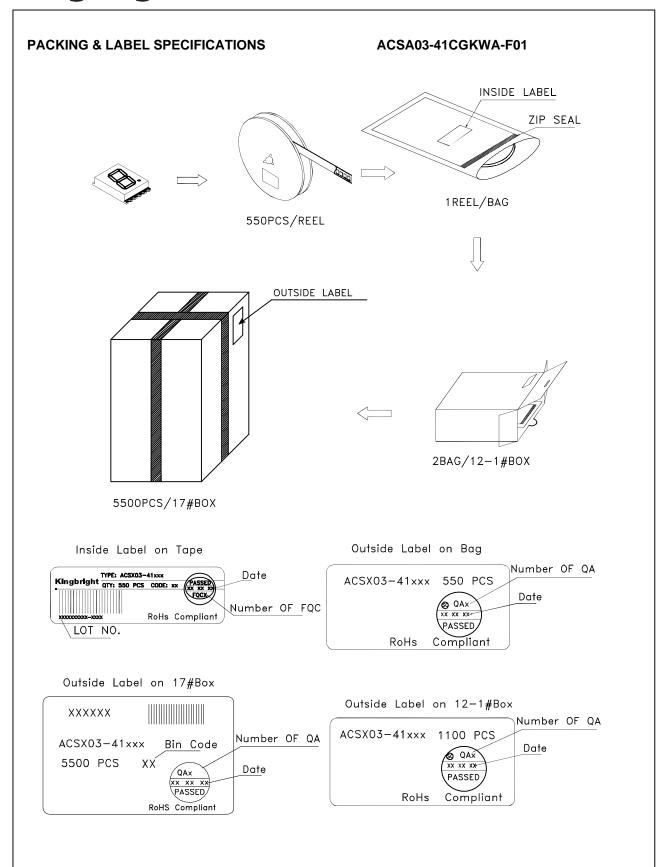


### **Tape Specifications** (Units: mm)



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All design applications should refer to Kingbright application notes available at  $\underline{\text{http://www.KingbrightUSA.com/ApplicationNotes}}$ 

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