

### SURFACE MOUNT DISPLAY

Part Number: ACPSA04-41CGKWA Green

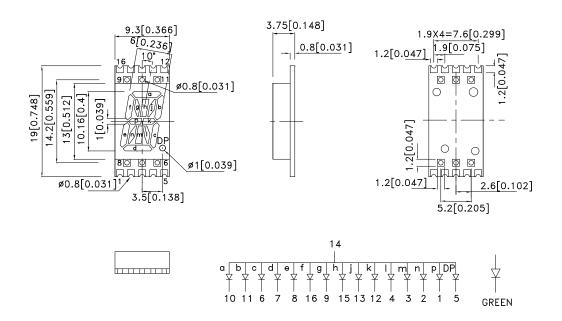
### **Features**

- 0.4 inch digit height.
- Low current operation.
- Excellent character appearance.
- Mechanically rugged.
- Gray face, white segment.
- Package:400pcs/ 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.
- The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
   The gap between the reflector and PCB shall not exceed 0.25mm.

SPEC NO: DSAG4987 **REV NO: V.9A DATE: NOV/09/2011** PAGE: 1 OF 5 APPROVED: WYNEC **CHECKED:** Joe Lee DRAWN: J.Yu ERP: 1361000052

### **Selection Guide**

	Part No.	Dice	Lens Type	lv (ucd) [1] @ 10mA		Description
				Min.	Тур.	2000pilo
	ACPSA04-41CGKWA	Green (AlGalnP)	White Diffused	5600	11000	Common Anode, Rt. Hand Decimal.
				*1400	*3100	

### 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
lr	Reverse Current	Green		10	uA	V <sub>R</sub> =5V

### Notes:

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

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

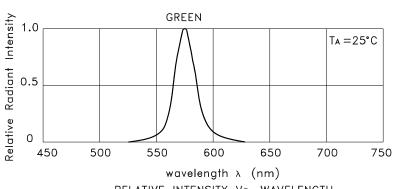
Parameter	Green	Units
Power dissipation	75	mW
DC Forward Current	30	mA
Peak Forward Current [1]	150	mA
Reverse Voltage	5	V
Operating / Storage Temperature	-40°C To +85°C	

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

SPEC NO: DSAG4987 **REV NO: V.9A** DATE: NOV/09/2011 PAGE: 2 OF 5 APPROVED: WYNEC **CHECKED:** Joe Lee DRAWN: J.Yu ERP: 1361000052

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

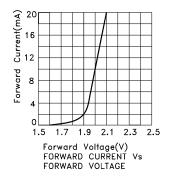
\* Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

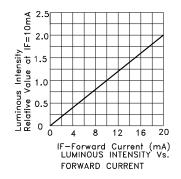


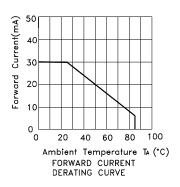
RELATIVE INTENSITY Vs. WAVELENGTH

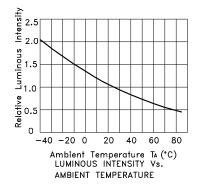
### Green

### ACPSA04-41CGKWA



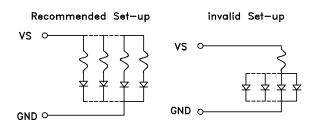






### CIRCUIT DESIGN NOTES

- 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.



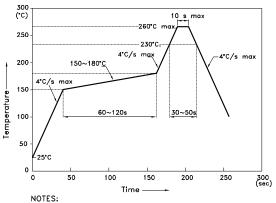
SPEC NO: DSAG4987 **APPROVED: WYNEC** 

**REV NO: V.9A CHECKED:** Joe Lee **DATE: NOV/09/2011** DRAWN: J.Yu

PAGE: 3 OF 5 ERP: 1361000052

### **ACPSA04-41CGKWA**

Reflow Soldering Profile For Lead-free SMT Process.



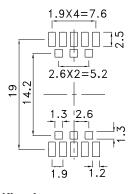
- NOTES:

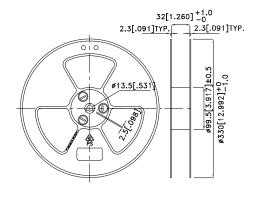
  1.We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.

  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.

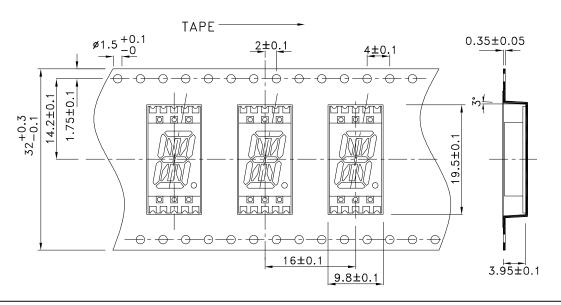
## Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.15)

### **Reel Dimension**

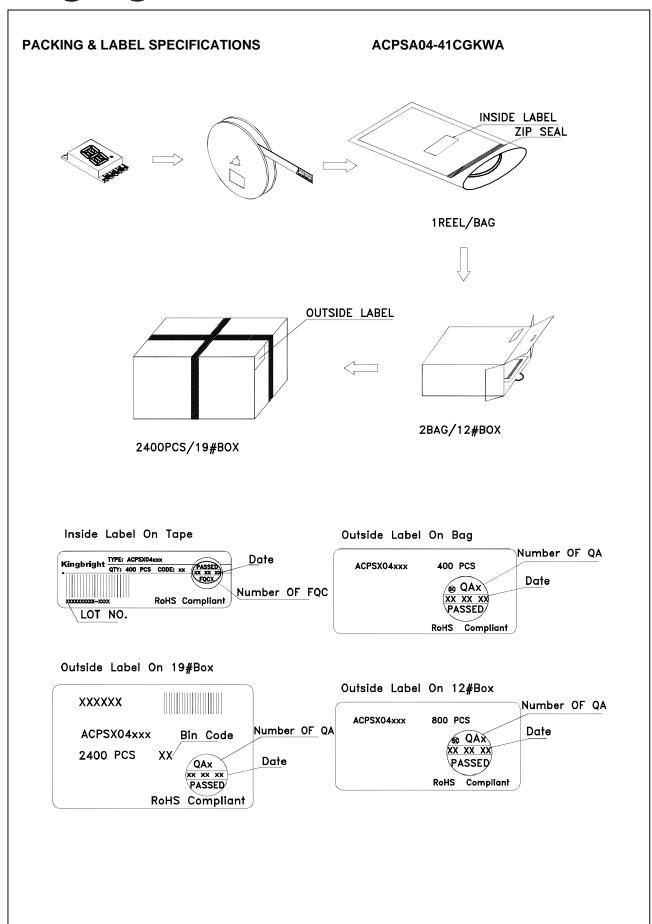




## Tape Specifications (Units: mm)



SPEC NO: DSAG4987 APPROVED: WYNEC REV NO: V.9A CHECKED: Joe Lee DATE: NOV/09/2011 DRAWN: J.Yu PAGE: 4 OF 5 ERP: 1361000052



SPEC NO: DSAG4987 APPROVED: WYNEC REV NO: V.9A CHECKED: Joe Lee DATE: NOV/09/2011 DRAWN: J.Yu PAGE: 5 OF 5 ERP: 1361000052