

### SURFACE MOUNT DISPLAY

Part Number: ACSC08-51CGKWA Green

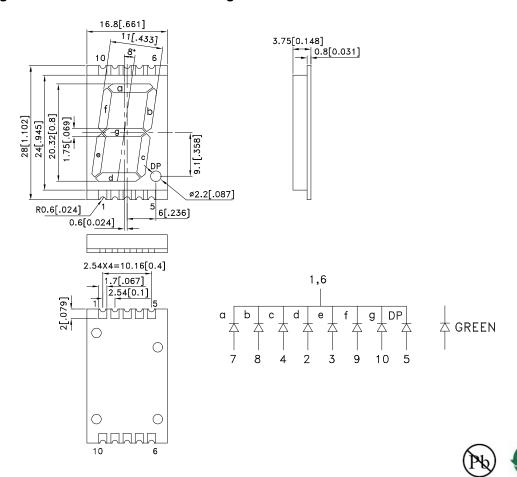
### **Features**

- 0.8 inch digit height.
- Low current operation.
- Excellent character appearance.
- Mechanically rugged.
- Gray face, white segment.
- Package: 200pcs/ 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: DSAG8878 **REV NO: V.6A** DATE: NOV/07/2012 PAGE: 1 OF 5 **APPROVED: WYNEC CHECKED:** Joe Lee DRAWN: C.H.HAN ERP: 1351000559

### **Selection Guide**

Part No.	Dice	Lens Type	lv (ucd) [1] @ 10mA		Description	
			Min.	Тур.	2000	
ACSC08-51CGKWA	Green (AlGalnP)	White Diffused	9000	18000	Common Cathode, Rt.	
ACSC00-STCGRWA	Gleen (AlGaine)	Willie Dillused	*2200	*6000	Hand Decimal.	

#### Notes:

- 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

### Notes:

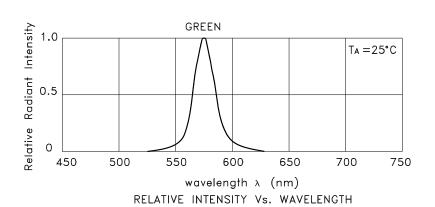
- 1.Wavelength: +/-1nm.
  2. Forward Voltage: +/-0.1V.
  3. Wavelength value is traceable to the CIE127-2007 compliant national standards.

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

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

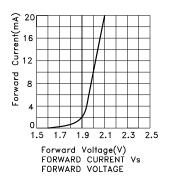
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

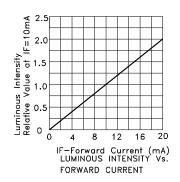
SPEC NO: DSAG8878 **REV NO: V.6A** DATE: NOV/07/2012 PAGE: 2 OF 5 APPROVED: WYNEC **CHECKED:** Joe Lee DRAWN: C.H.HAN ERP: 1351000559

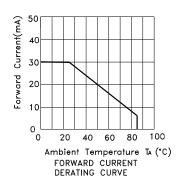


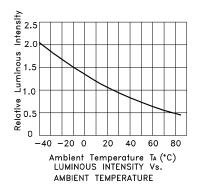
#### Green

### ACSC08-51CGKWA



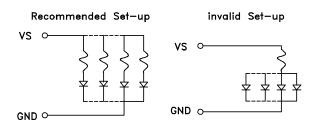






### CIRCUIT DESIGN NOTES

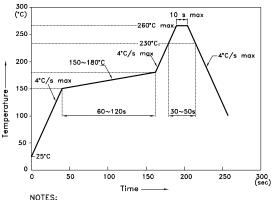
- 1.Protective current—limiting resistors may be necessary to operate the Displays.
- 2.LEDs mounted in parallel should each be placed in series with its own current—limiting resistor.



SPEC NO: DSAG8878 APPROVED: WYNEC REV NO: V.6A CHECKED: Joe Lee DATE: NOV/07/2012 DRAWN: C.H.HAN PAGE: 3 OF 5 ERP: 1351000559

### ACSC08-51CGKWA

Reflow Soldering Profile For Lead-free SMT Process.



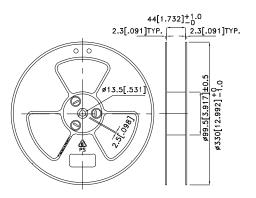
- NOTES:

  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.

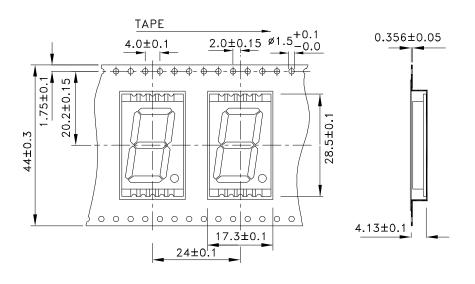
### **Recommended Soldering Pattern** (Units: mm; Tolerance: ± 0.15)

# 2.54X4=10.16 Θ 27

### **Reel Dimension**



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

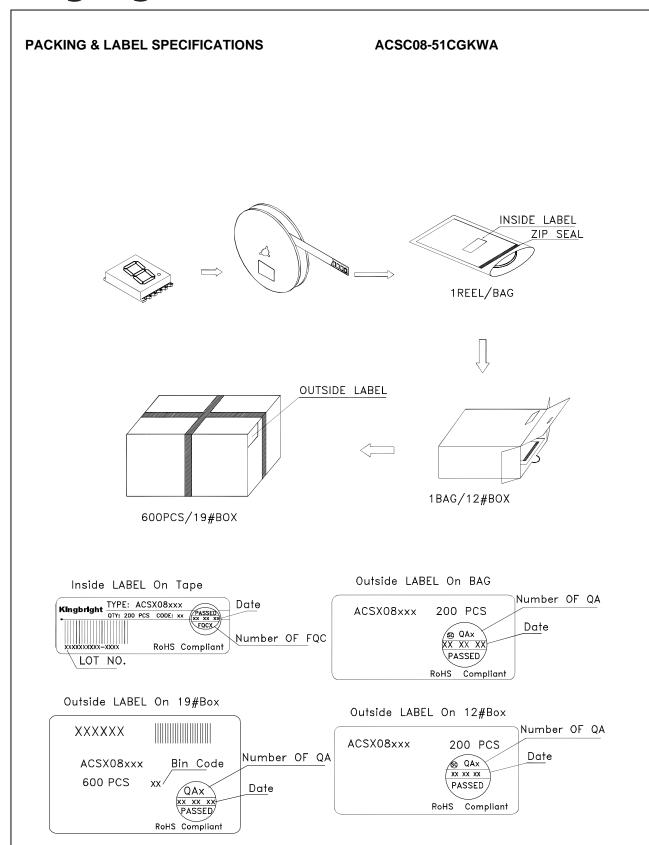


**SPEC NO: DSAG8878 APPROVED: WYNEC** 

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PAGE: 4 OF 5 ERP: 1351000559



All design applications should refer to Kingbright application notes available at <a href="http://www.KingbrightUSA.com/ApplicationNotes">http://www.KingbrightUSA.com/ApplicationNotes</a>

 SPEC NO: DSAG8878
 REV NO: V.6A
 DATE: NOV/07/2012
 PAGE: 5 OF 5

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