

#### SURFACE MOUNT DISPLAY

Part Number: ACSA08-51CGKWA Green

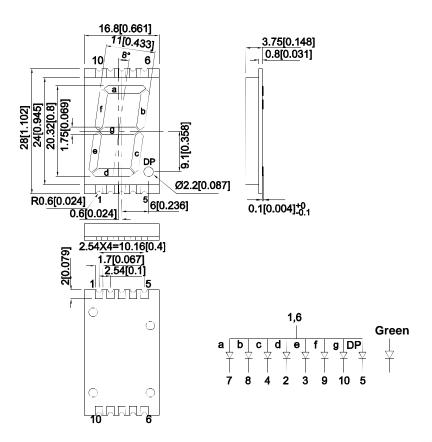
#### **Features**

- 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**



SPEC NO: DSAG8873

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- 1. All dimensions are in millimeters (inches), Tolerance is  $\pm 0.25 (0.01")$  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.

**REV NO: V.8A** DATE: DEC/21/2015 PAGE: 1 OF 5 **CHECKED:** Joe Lee DRAWN: M.Liu ERP: 1351000563

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#### **Selection Guide**

Part No.	Emitting Color (Material)	Lens Type	lv (ucd) [1] @ 10mA		Description
			Min.	Тур.	
ACSA08-51CGKWA	Green (AlGalnP)	NGaInP) White Diffused	9000	18000	Common Anode, Rt. Hand Decimal.
ACSA06-STCGRWA	Oleen (Albaini )		*2200	*6000	

#### Notes:

- 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	Emitting Color	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Green	574		nm	IF=10mA
λD [1]	Dominant Wavelength	Green	570		nm	IF=10mA
Δλ1/2	Spectral Line Half-width	Green	20		nm	IF=10mA
С	Capacitance	Green	15		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Green	2	2.5	V	IF=10mA
lR	Reverse Current	Green		10	uA	V <sub>R</sub> =5V

- 1. Wavelength: +/-1nm.
- 2. Forward Voltage: +/-0.1V.
- 3. Wavelength value is traceable to the CIE127-2007 compliant national standards.
- 4. Excess driving current and/or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

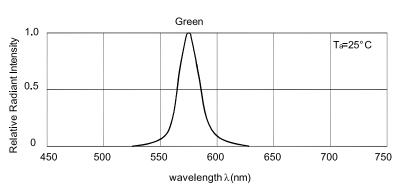
### Absolute Maximum Ratings at TA=25°C

Parameter	Values	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: DSAG8873 **REV NO: V.8A** DATE: DEC/21/2015 PAGE: 2 OF 5 APPROVED: Wynec **CHECKED:** Joe Lee DRAWN: M.Liu ERP: 1351000563

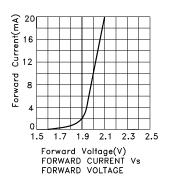
## **Kingbright**

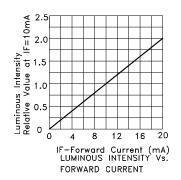


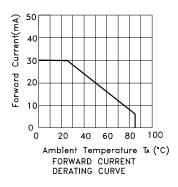
Relative Intensity Vs. Wavelength

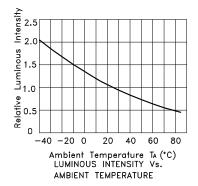
#### Green

#### ACSA08-51CGKWA



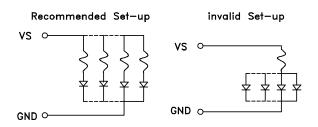






#### CIRCUIT DESIGN NOTES

- 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.

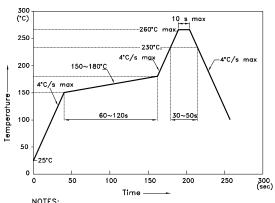


SPEC NO: DSAG8873 APPROVED: Wynec REV NO: V.8A CHECKED: Joe Lee DATE: DEC/21/2015 DRAWN: M.Liu PAGE: 3 OF 5 ERP: 1351000563

## **Kingbright**

#### ACSA08-51CGKWA

Reflow Soldering Profile For Lead-free SMT Process.



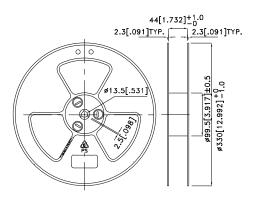
- NOTES:

  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.

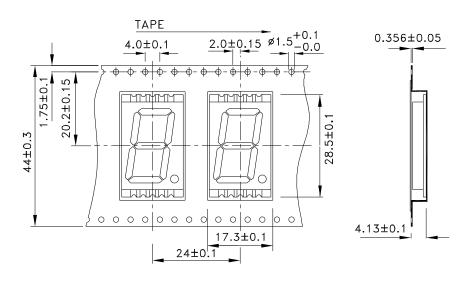
#### **Recommended Soldering Pattern** (Units: mm; Tolerance: ± 0.15)

# 2.54X4=10.16

#### **Reel Dimension**



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



SPEC NO: DSAG8873 **REV NO: V.8A** DATE: DEC/21/2015 PAGE: 4 OF 5 ERP: 1351000563 APPROVED: Wynec **CHECKED:** Joe Lee DRAWN: M.Liu



## **PACKING & LABEL SPECIFICATIONS** ACSA08-51CGKWA INSIDE LABEL 1REEL/BAG OUTSIDE LABEL 1BAG/12-1#BOX 1000PCS/17#BOX Inside LABEL On BAG Inside LABEL On Tape Number OF QA bright TYPE: ACSX08xxx ACSX08xxx 200 PCS Date Number OF FQC RoHS Compliant LOT NO. PASSED Outside LABEL On 17#Box Outside LABEL On 12-1#Box Number OF QA XXXXXX ACSX08xxx 200 PCS Number OF QA <u>Dat</u>e QAX XX XX XX ACSX08xxx 1000 PCS

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**QAX** 

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<u>Dat</u>e

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Compliant

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SPEC NO: DSAG8873 **REV NO: V.8A DATE: DEC/21/2015** PAGE: 5 OF 5 **APPROVED: Wynec CHECKED:** Joe Lee DRAWN: M.Liu ERP: 1351000563