

SURFACE MOUNT DISPLAY

Part Number: ACSC08-51CGKWA Green

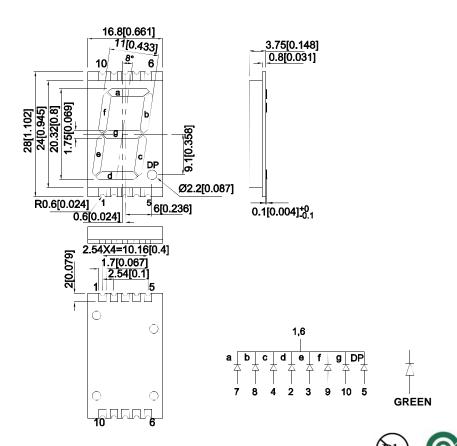
Features

- 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.

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Selection Guide

Part No.	o. Emitting Color (Material) Lens Type		lv (ucd) [1] @ 10mA		Description
			Min.	Тур.	
ACSC08-51CGKWA	Green (AlGalnP)	White Diffused	9000	18000	Common Cathode, Rt.Hand Decimal.
			*2200	*6000	

- 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	VR=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.

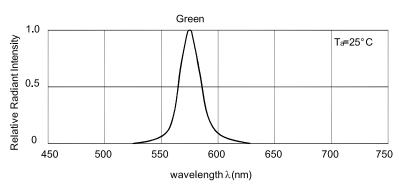
Absolute Maximum Ratings at TA=25°C

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		

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

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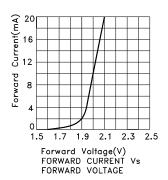
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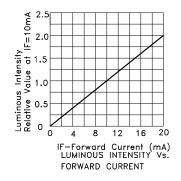


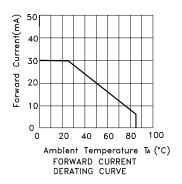
Relative Intensity Vs. Wavelength

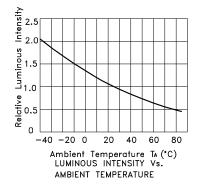
Green

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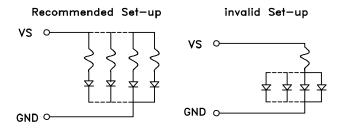






CIRCUIT DESIGN NOTES

- 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.

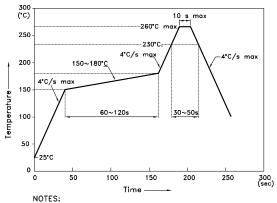


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Reflow Soldering Profile For Lead-free SMT Process.



- NOTES:

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

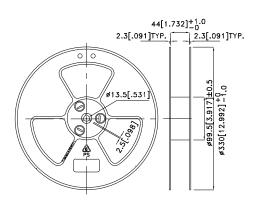
 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.
- 3. Number of reflow process shall be 2 times or less.

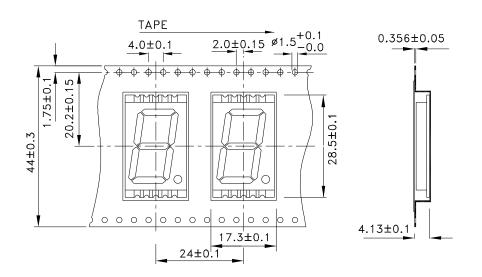
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.15)

2.54X4=10.16 2.54 2.54 2.54 2.54 2.54 2.54 2.54 2.54

Tape Specifications (Units : mm)

Reel Dimension





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PACKING & LABEL SPECIFICATIONS ACSC08-51CGKWA INSIDE LABEL ZIP SEAL 1REEL/BAG OUTSIDE LABEL 1BAG/12-1#BOX 1000PCS/17#BOX Inside LABEL On BAG Inside LABEL On Tape Number OF QA Kingbright TYPE: ACSX08xxx Date ACSX08xxx 200 PCS <u>Dat</u>e Ø QAx XX XX XX Number OF FQC RoHS Compliant \PASSED. LOT NO. RoHS Compliant Outside LABEL On 17#Box Outside LABEL On 12-1#Box Number OF QA XXXXXX ACSX08xxx 200 PCS Number OF QA Date ACSX08xxx 1000 PCS <u>Dat</u>e QAX PASSED PASSED RoHS Compliant RoHS Complian

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