

SURFACE MOUNT DISPLAY

Part Number: ACSC08-51SGWA

Super Bright Green

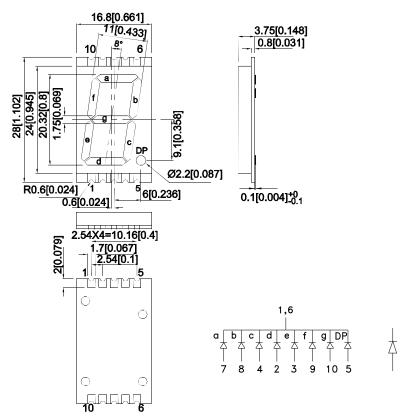
Features

- 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 Super Bright Green source color devices are made with Gallium Phosphide Green 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: DSAH3713 **REV NO: V.5A DATE: DEC/18/2015** PAGE: 1 OF 5 **APPROVED: Wynec CHECKED:** Joe Lee DRAWN: L.Q.Xie ERP: 1351000568

Selection Guide

Part No.	Emitting Color (Material)	olor (Material) Lens Type lv (ucd) @ 10m		,	
			Min.	Тур.	
ACSC08-51SGWA	Super Bright Green (GaP)	White Diffused	3600	7000	Common Cathode, Rt.Hand Decimal.
AC3C06-313GWA			*900	*2100	

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	Super Bright Green	565		nm	IF=10mA		
λD [1]	Dominant Wavelength	Super Bright Green	568		nm	IF=10mA		
Δλ1/2	Spectral Line Half-width	Super Bright Green	30		nm	IF=10mA		
С	Capacitance	Super Bright Green	15		pF	V _F =0V;f=1MHz		
VF [2]	Forward Voltage	Super Bright Green	2.0	2.5	V	IF=10mA		
lr	Reverse Current	Super Bright Green		10	uA	V _R =5V		

Notes:

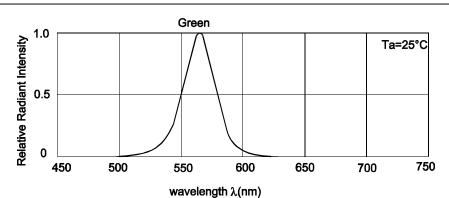
- 1. Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.
- 3. Wavelength value is traceable to the CIE127-2007 compliant national standards.
- 4. Excess driving current and / or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

Absolute Maximum Ratings at TA=25°C

Parameter	Values	Units	
Power dissipation	62.5	mW	
DC Forward Current	25	mA	
Peak Forward Current [1]	140	mA	
Reverse Voltage	5	V	
Operating / Storage Temperature	-40°C To +85°C		

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

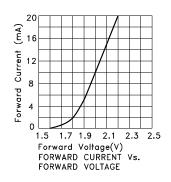
SPEC NO: DSAH3713 **REV NO: V.5A DATE: DEC/18/2015** PAGE: 2 OF 5 **APPROVED:** Wynec **CHECKED:** Joe Lee DRAWN: L.Q.Xie ERP: 1351000568

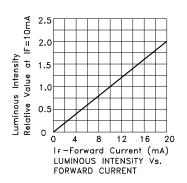


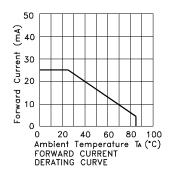
Relative Intensity Vs. Wavelength

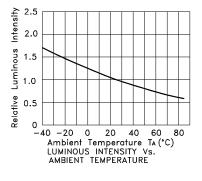
Super Bright Green

ACSC08-51SGWA



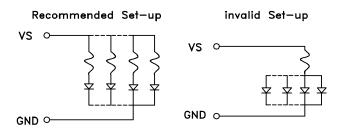






CIRCUIT DESIGN NOTES

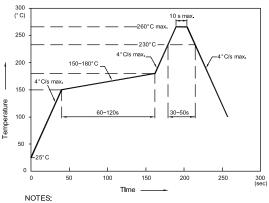
- 1.Protective current—limiting resistors may be necessary to operate the Displays.
- 2.LEDs mounted in parallel should each be placed in series with its own current—limiting resistor.



SPEC NO: DSAH3713 APPROVED: Wynec REV NO: V.5A CHECKED: Joe Lee DATE: DEC/18/2015 DRAWN: L.Q.Xie PAGE: 3 OF 5 ERP: 1351000568

ACSC08-51SGWA

Reflow Soldering Profile For Lead-free SMT Process.



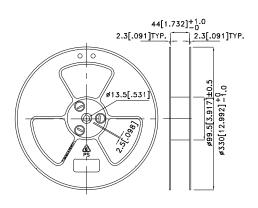
- 1.We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.
- 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.
- 3. Number of reflow process shall be 2 times or less.

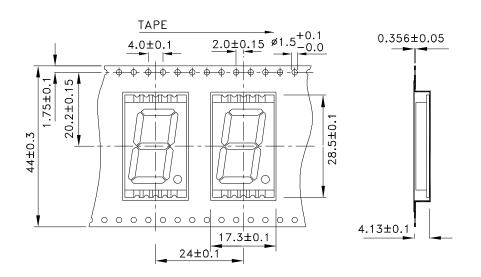
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.15)

2.54X4=10.16 2.54 9 27.

Tape Specifications (Units:mm)

Reel Dimension





SPEC NO: DSAH3713 **REV NO: V.5A APPROVED: Wynec CHECKED:** Joe Lee

DATE: DEC/18/2015 DRAWN: L.Q.Xie ERP: 1351000568

PAGE: 4 OF 5

PACKING & LABEL SPECIFICATIONS ACSC08-51SGWA INSIDE LABEL ZIP SEAL 1REEL/BAG OUTSIDE LABEL 1BAG/12-1#BOX 1000PCS/17#BOX Inside LABEL On BAG Inside LABEL On Tape Ingbright TYPE: ACSX08xxx Number OF QA 200 PCS ACSX08xxx Date Ø QAx XX 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

Date

Terms and conditions for the usage of this document

RoHS Compliant

XXXXXX

ACSX08xxx

1000 PCS

1. The information included in this document reflects representative usage scenarios and is intended for technical reference only.

ACSX08xxx

Number OF QA

Date

200 PCS

QAX XX XX XX

RoHS

PASSED

Compliant

- 2. The part number, type, and specifications mentioned in this document are subject to future change and improvement without notice. Before production usage customer should refer to the latest datasheet for the updated specifications.
- 3. When using the products referenced in this document, please make sure the product is being operated within the environmental and electrical limits specified in the datasheet. If customer usage exceeds the specified limits, Kingbright will not be responsible for any subsequent issues.
- 4. The information in this document applies to typical usage in consumer electronics applications. If customer's application has special reliability requirements or have life-threatening liabilities, such as automotive or medical usage, please consult with Kingbright representative for further assistance.
- 5. The contents and information of this document may not be reproduced or re-transmitted without permission by Kingbright.
- 6. All design applications should refer to Kingbright application notes available at http://www.KingbrightUSA.com/ApplicationNotes

 SPEC NO: DSAH3713
 REV NO: V.5A
 DATE: DEC/18/2015
 PAGE: 5 OF 5

 APPROVED: Wynec
 CHECKED: Joe Lee
 DRAWN: L.Q.Xie
 ERP: 1351000568