

SURFACE MOUNT DISPLAY

Part Number: ACSC08-51SGWA

Super Bright Green

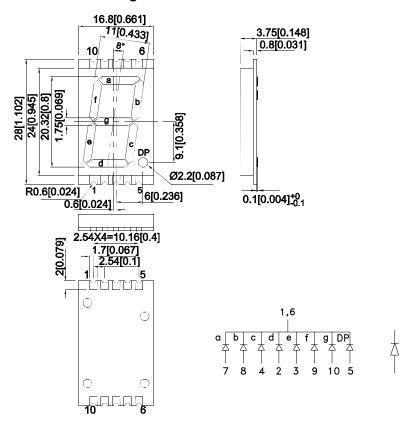
Features

- 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.

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Selection Guide

| Part No. | Emitting Color (Material) Lens Type | | lv (ucd) [1] @ 10mA | | Description |
|-------------------|-------------------------------------|----------------|------------------------|-------|-------------------------------------|
| | | | Min. | Тур. | |
| ACSC08-51SGWA Sup | Super Bright Green (GaP) | White Diffused | 3600 | 7000 | Common Cathode, Rt.Hand Decimal. |
| | | | *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 | VF=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:

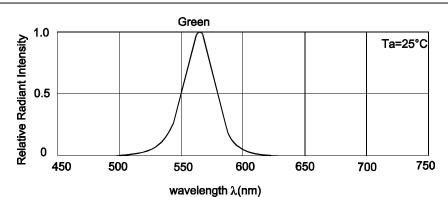
- 1. Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.
- 3. Wavelength value is traceable to the CIE127-2007 compliant national standards.
- 4. Excess driving current and / or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

Absolute Maximum Ratings at TA=25°C

| Parameter | rameter Values | | |
|---------------------------------|----------------|----|--|
| 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.

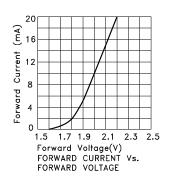
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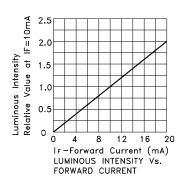


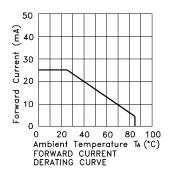
Relative Intensity Vs. Wavelength

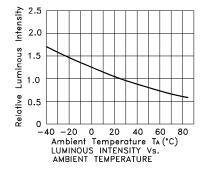
Super Bright Green

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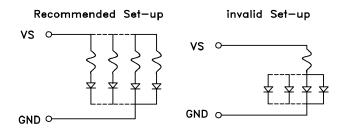






CIRCUIT DESIGN NOTES

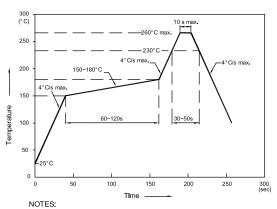
- 1.Protective current—limiting resistors may be necessary to operate the Displays.
- 2.LEDs mounted in parallel should each be placed in series with its own current—limiting resistor.



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Reflow Soldering Profile For Lead-free SMT Process.



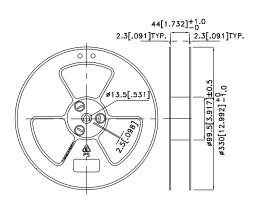
- 1.We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.
- 2.Don't cause stress to the epoxy resin while it is exposed
- to high temperature.
- 3. Number of reflow process shall be 2 times or less.

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

2.54X4=10.16 2.54 9 27.

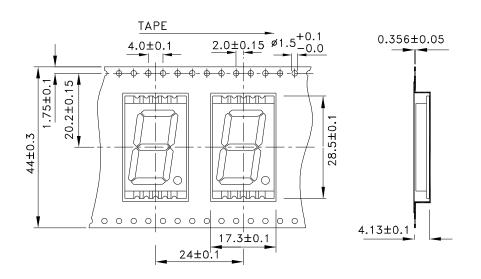
Tape Specifications (Units: mm)

Reel Dimension



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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 ACSX08xxx 200 PCS 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 XXXXXX Number OF QA ACSX08xxx 200 PCS

Number OF QA

Date

Terms and conditions for the usage of this document

RoHS Compliant

ACSX08xxx

1000 PCS

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

Date

QAX XX XX XX

RoHS

PASSED

Compliant

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