

SURFACE MOUNT DISPLAY

Part Number: ACSA56-41SGWA-F01

Super Bright Green

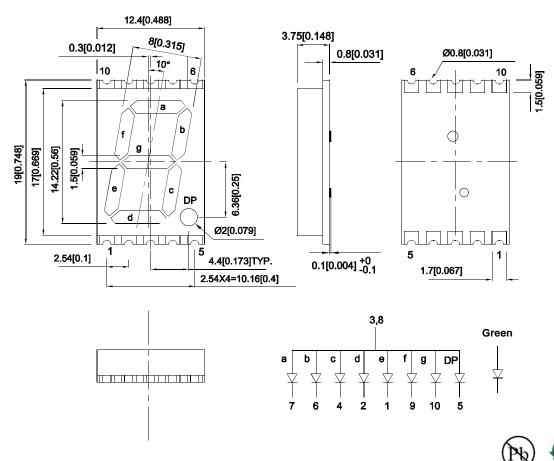
Features

- 0.56 inch digit height.
- Low current operation.
- Excellent character appearance.
- Mechanically rugged.
- Gray face, white segment.
- Package: 400pcs/ 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	Iv (ucd) [1] @ 10mA		Description
			Min.	Тур.	
ACSA56-41SGWA-F01	Super Bright Green (GaP)	White Diffused	3600	6000	Common Anode,Rt. Hand Decimal.
			*900	*1800	

- 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	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	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.

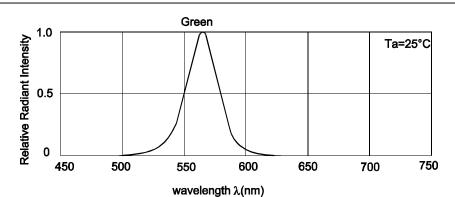
Absolute Maximum Ratings at TA=25°C

Parameter	Values	Units	
Power dissipation	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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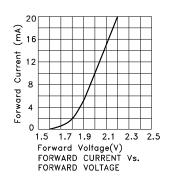
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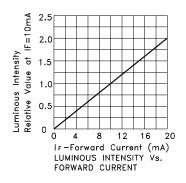


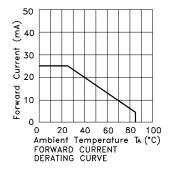
Relative Intensity Vs. Wavelength

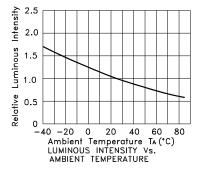
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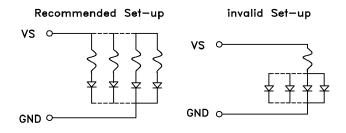






CIRCUIT DESIGN NOTES

- 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.

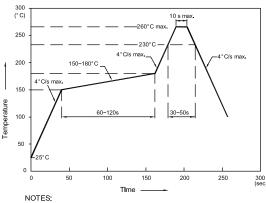


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Reflow Soldering Profile For Lead-free SMT Process.



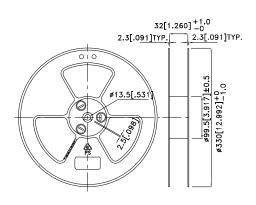
- 1.We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.
- 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.
- 3. Number of reflow process shall be 2 times or less.

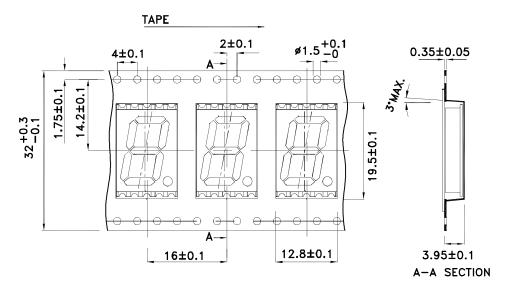
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.15)

2.54X4=10.16 2.54 1.7

Tape Specifications (Units: mm)

Reel Dimension





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PACKING & LABEL SPECIFICATIONS ACSA56-41SGWA-F01 INSIDE LABEL ZIP SEAL 1REEL/BAG OUTSIDE LABEL 2BAG/12-1#BOX 4000PCS/17#BOX Inside Label on Tape Outside Label on Bag Number OF QA Kingbright TYPE: ACSX56XX Date ACSX56XX 400 PCS Number OF FQC <u>Date</u> € QAx RoHS Compliant PASSED LOT NO. RoHS Compliant Outside Label on 17#Box Outside Label on 12-1#Box XXXXXXNumber OF QA ACSX56XX 800 PCS Number OF QA Date ACSX56XX © QAx 4000PCS Date PASSED RoHS Compliant RoHS Compliant

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