

SURFACE MOUNT DISPLAY

Part Number: ACPSC04-41SGWA

Super Bright Green

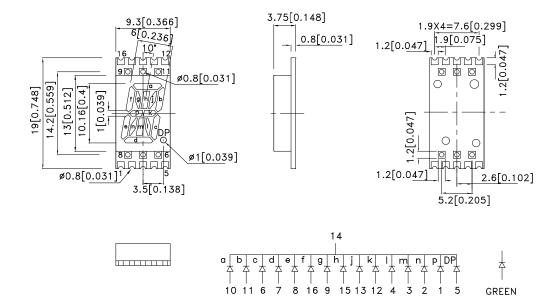
Features

- 0.4 inch character height.
- Low current operation.
- High contrast and light output.
- Categorized for luminous intensity.
- 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.
- 2. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.

 3. The gap between the reflector and PCB shall not exceed 0.25mm.

SPEC NO: DSAH3711 **REV NO: V.8A DATE: APR/28/2013** PAGE: 1 OF 5 APPROVED: WYNEC **CHECKED:** Joe Lee DRAWN: F.Cui ERP: 1361000043

Selection Guide

Part No.	Dice	Lens Type	Iv (ucd) [1] @ 10mA		Description
			Min.	Тур.	2333
ACPSC04-41SGWA	Super Bright Green (GaP)	White Diffused	1400	2900	Common Cathode, Rt. Hand Decimal.
			*360	*900	

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Green	565		nm	IF=20mA
λD [1]	Dominant Wavelength	Super Bright Green	568		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Super Bright Green	30		nm	IF=20mA
С	Capacitance	Super Bright Green	15		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Super Bright Green	2.2	2.5	V	IF=20mA
IR	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.

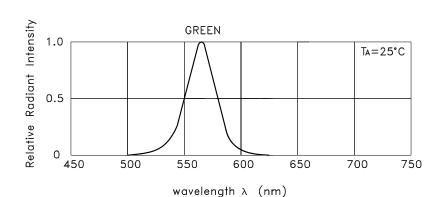
Absolute Maximum Ratings at TA=25°C

Parameter	Super Bright Green	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		

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

SPEC NO: DSAH3711 **REV NO: V.8A** DATE: APR/28/2013 PAGE: 2 OF 5 APPROVED: WYNEC **CHECKED:** Joe Lee DRAWN: F.Cui ERP: 1361000043

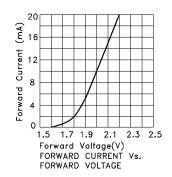
Luminous intensity/ luminous Flux: +/-15%.
 *Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

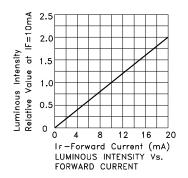


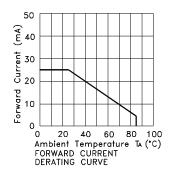
RELATIVE INTENSITY Vs. WAVELENGTH

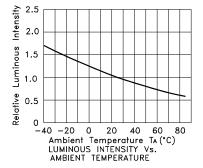
Super Bright Green

ACPSC04-41SGWA



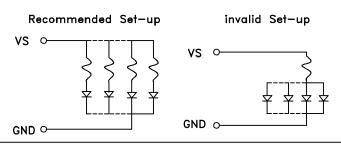






CIRCUIT DESIGN NOTES

- 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.



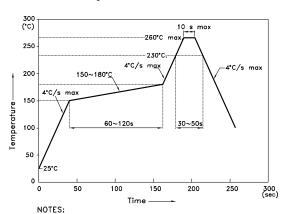
SPEC NO: DSAH3711 REV NO: V.8A

APPROVED: WYNEC CHECKED: Joe Lee

DATE: APR/28/2013 DRAWN: F.Cui PAGE: 3 OF 5 ERP: 1361000043

ACPSC04-41SGWA

Reflow Soldering Profile For Lead-free SMT Process.



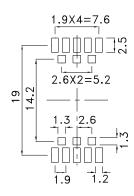
- 1.We recommend the reflow temperature 245°C(+/-5°C).The maximum soldering temperature should be limited to 260°C.

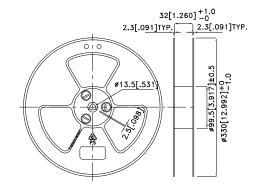
 2.Don't cause stress to the epoxy resin while it is exposed
- to high temperature.

 3.Number of reflow process shall be 2 times or less.

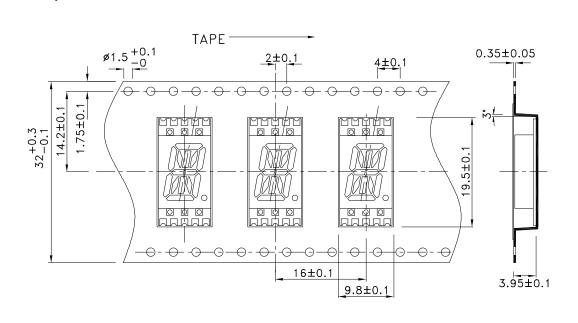
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.15)

Reel Dimension



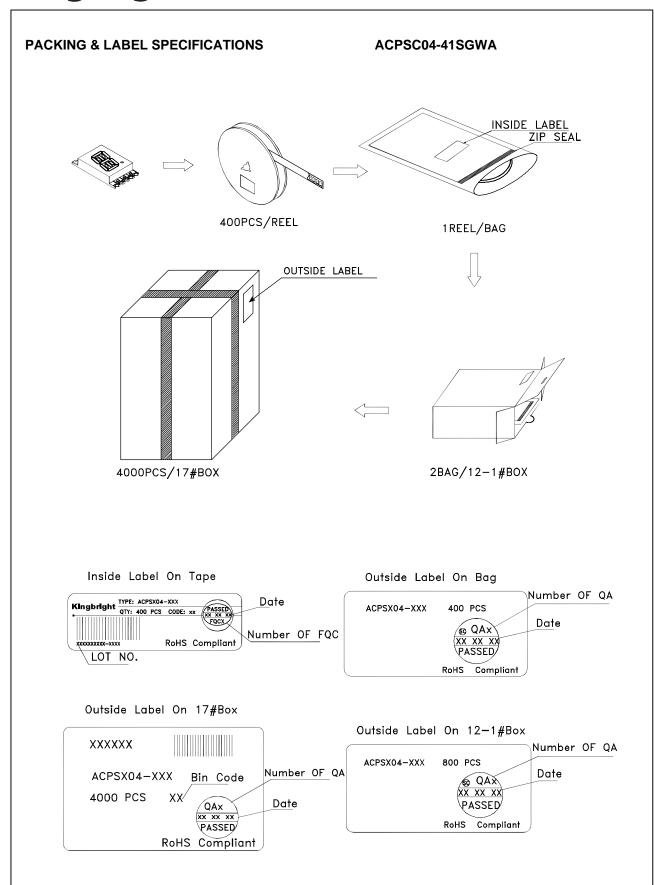


Tape Specifications (Units: mm)



 SPEC NO: DSAH3711
 REV NO: V.8A
 DATE: APR/28/2013
 PAGE: 4 OF 5

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 SPEC NO: DSAH3711
 REV NO: V.8A
 DATE: APR/28/2013
 PAGE: 5 OF 5

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All design applications should refer to Kingbright application notes available at

http://www.KingbrightUSA.com/ApplicationNotes