

SURFACE MOUNT DISPLAY

Part Number: ACPSA04-41SGWA

Super Bright Green

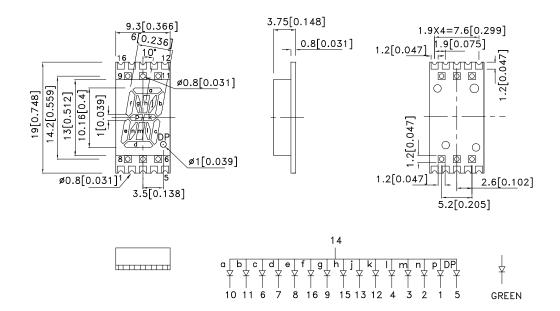
Features

- 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.

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Selection Guide

Part No.	Dice	Lens Type	lv (ucd) [1] @ 10mA		Description
			Min.	Тур.	2000 i pilon
ACPSA04-41SGWA	Super Bright Green (GaP)	White Diffused	1400	2900	Common Anode, 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

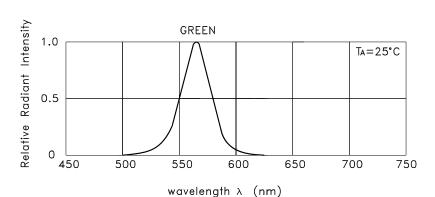
Parameter	Super Bright Green	Units
Power dissipation	62.5	mW
DC Forward Current	25	mA
Peak Forward Current [1]	140	mA
Reverse Voltage	5	V
Operating / Storage Temperature	-40°C To +85°C	

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

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^{1.} Luminous intensity/ luminous Flux: +/-15%.

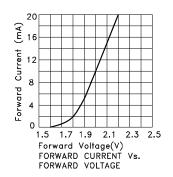
*Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

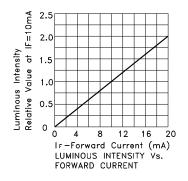


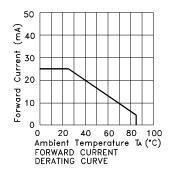
RELATIVE INTENSITY Vs. WAVELENGTH

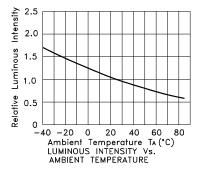
Super Bright Green

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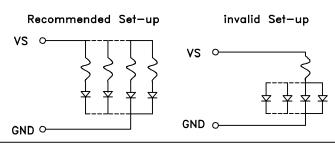






CIRCUIT DESIGN NOTES

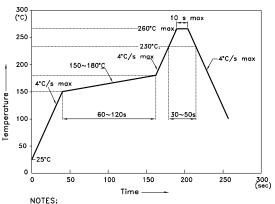
- 1.Protective current—limiting resistors may be necessary to operate the Displays.
- 2.LEDs mounted in parallel should each be placed in series with its own current—limiting resistor.



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Reflow Soldering Profile For Lead-free SMT Process.

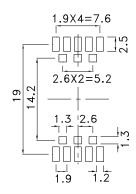


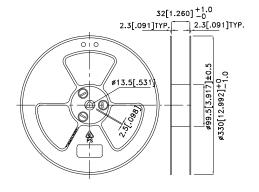
- 1.We recommend the reflow temperature 245°C(+/-5°C).The maximum soldering temperature should be limited to 260°C.
- 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.
- to high temperature.

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

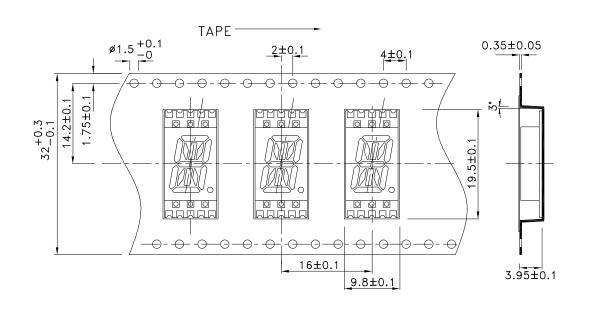
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.15)

Reel Dimension



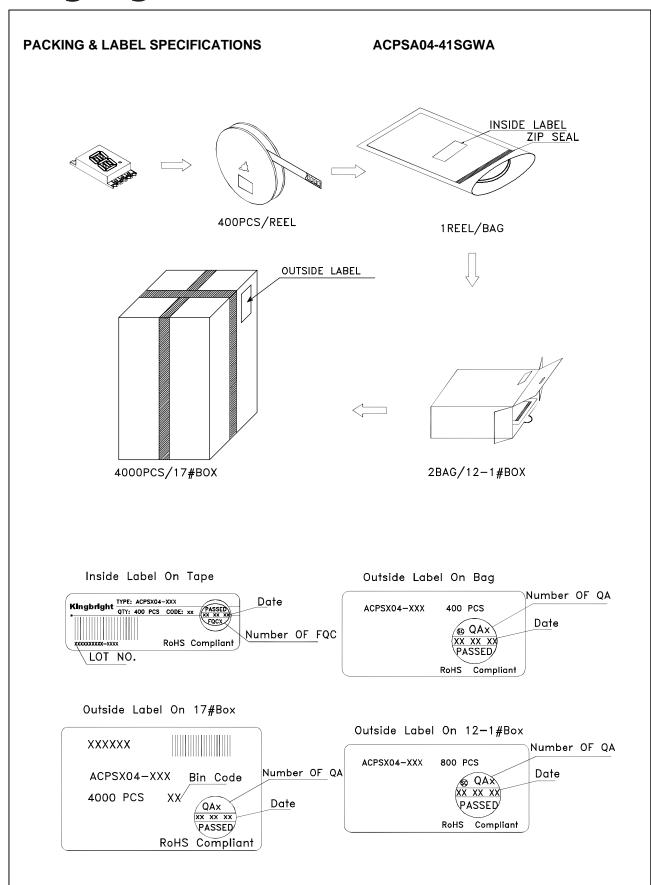


Tape Specifications (Units: mm)



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All design applications should refer to Kingbright application notes available at

http://www.KingbrightUSA.com/ApplicationNotes