

#### SURFACE MOUNT DISPLAY

Part Number: ACDC04-41SGWA-F01

Super Bright Green

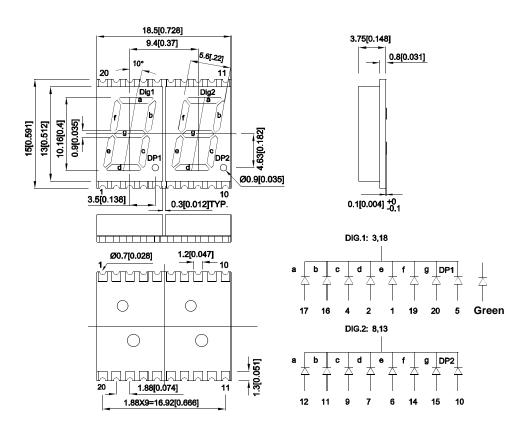
#### **Features**

- 0.4 inch digit height.
- Low current operation.
- Excellent character appearance.
- Mechanically rugged.
- Gray face, white segment.
- Package: 250pcs/ 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: DSAG4231 **REV NO: V.9A** DATE: DEC/31/2015 PAGE: 1 OF 5 APPROVED: Wynec **CHECKED:** Joe Lee DRAWN: M.Liu ERP: 1352000292

#### **Selection Guide**

Part No.	Emitting Color (Material)	Lens Type	Iv (ucd) [1] @ 10mA		Description
			Min.	Тур.	
ACDC04-41SGWA-F01	Super Bright Green (GaP)	White Diffused	2200	4700	Common Cathode, Rt. Hand Decimal
			*560	*1200	

#### Note:

- 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	I==10mA
λD [1]	Dominant Wavelength	Super Bright Green	568		nm	I==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	2.5	V	IF=10mA
lr	Reverse Current	Super Bright Green		10	uA	V <sub>R</sub> =5V

- Notes:

  1. Wavelength: +/-1nm.

  2. Forward Voltage: +/-0.1V.

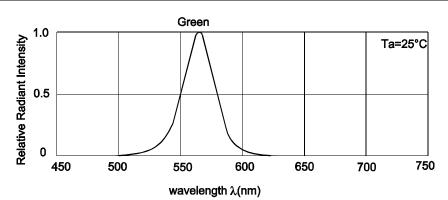
  3. Wavelength value is traceable to the CIE127-2007 compliant national standards.
- Excess driving current and / or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

#### 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		

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

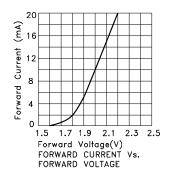
SPEC NO: DSAG4231 **REV NO: V.9A** DATE: DEC/31/2015 PAGE: 2 OF 5 APPROVED: Wynec **CHECKED:** Joe Lee DRAWN: M.Liu ERP: 1352000292

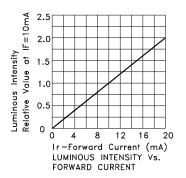


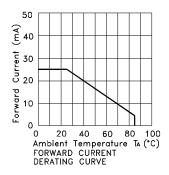
Relative Intensity Vs. Wavelength

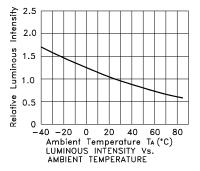
#### **Super Bright Green**

#### ACDC04-41SGWA-F01



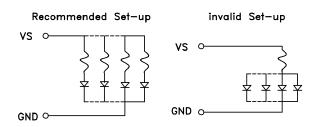






## CIRCUIT DESIGN NOTES

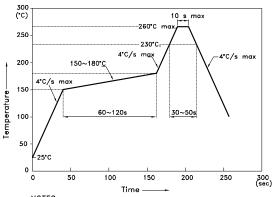
- 1.Protective current—limiting resistors may be necessary to operate the Displays.
- 2.LEDs mounted in parallel should each be placed in series with its own current—limiting resistor.



SPEC NO: DSAG4231 APPROVED: Wynec REV NO: V.9A CHECKED: Joe Lee DATE: DEC/31/2015 DRAWN: M.Liu PAGE: 3 OF 5 ERP: 1352000292

#### ACDC04-41SGWA-F01

Reflow Soldering Profile For Lead-free SMT Process.



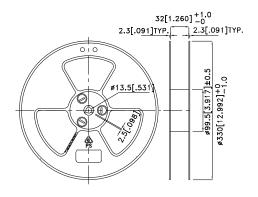
OILS: 1.We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.

- 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.

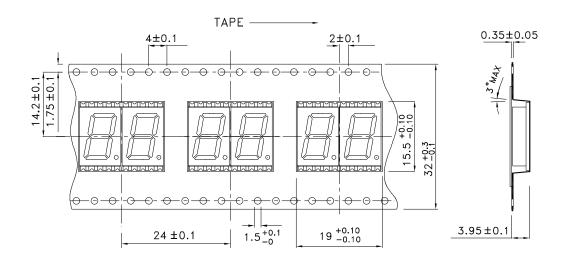
#### **Recommended Soldering Pattern** (Units: mm; Tolerance: ± 0.15)

# 1.88X9=16.92 5 1.88

#### **Reel Dimension**



#### **Tape Specifications** (Units: mm)

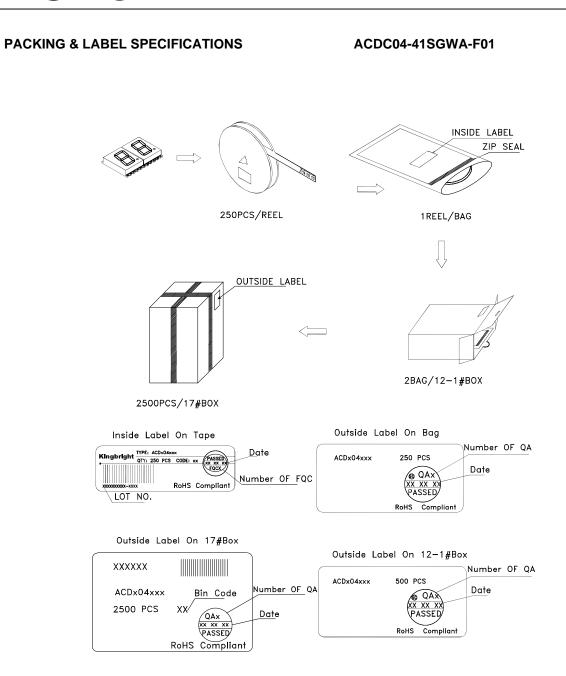


SPEC NO: DSAG4231 APPROVED: Wynec

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PAGE: 4 OF 5 ERP: 1352000292



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 SPEC NO: DSAG4231
 REV NO: V.9A
 DATE: DEC/31/2015
 PAGE: 5 OF 5

 APPROVED: Wynec
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