

#### SURFACE MOUNT DISPLAY

Part Number: ACDC02-41CGKWA-F01 Green

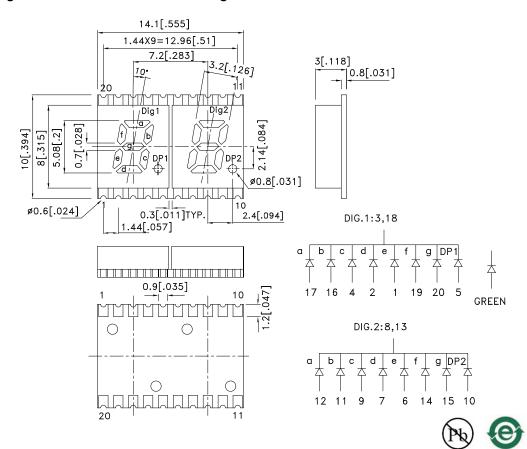
#### **Features**

- 0.2 inch digit height.
- Low current operation.
- Excellent character appearance.
- Mechanically rugged.
- Package :300pcs / reel.
- Gray face, white segment.
- Moisture sensitivity level : level 2a.
- RoHS compliant.

#### Description

The Green source color devices are made with AlGaInP on GaAs substrate 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: DSAG0225 **REV NO: V.8** APPROVED: WYNEC **CHECKED:** Joe Lee DATE: MAR/17/2011 DRAWN: J.Yu

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## **Selection Guide**

Part No.	Dice	Lens Type	lv (ucd) [1] @ 10mA		Description
		,,	Min.	Тур.	•
ACDC02-41CGKWA-F01	Green (AlGaInP)	White Diffused	3600	12000	Common Cathode, Rt. Hand Decimal.

#### Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Green	574		nm	IF=20mA
λD [1]	Dominant Wavelength	Green	570		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Green	20		nm	I=20mA
С	Capacitance	Green	15		pF	V <sub>F</sub> =0V;f=1MHz
VF [2]	Forward Voltage	Green	2.1	2.5	V	I=20mA
IR	Reverse Current	Green		10	uA	V <sub>R</sub> =5V

#### Notes:

- 1.Wavelength: +/-1nm.
  2. Forward Voltage: +/-0.1V.

#### Absolute Maximum Ratings at TA=25°C

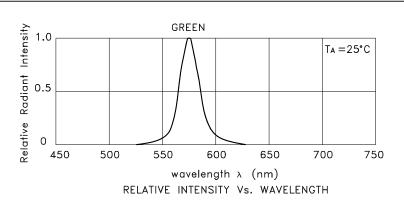
Parameter	Green	Units	
Power dissipation	75	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	150	mA	
Reverse Voltage	5	V	
Operating / Storage Temperature	-40°C To +85°C		

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

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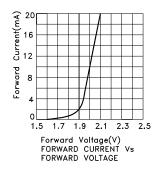
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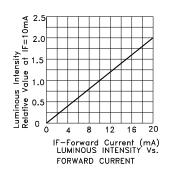
<sup>1.</sup> Luminous intensity/ luminous Flux: +/-15%.

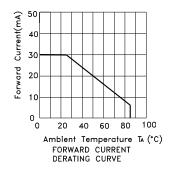


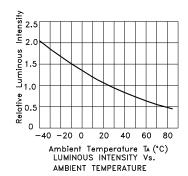
#### Green

#### ACDC02-41CGKWA-F01



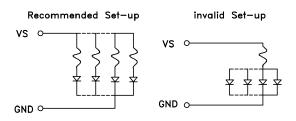






### CIRCUIT DESIGN NOTES

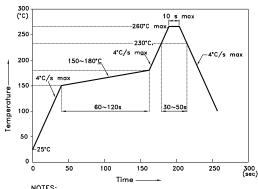
- 1.Protective current—limiting resistors may be necessary to operate the Displays.
- 2.LEDs mounted in parallel should each be placed in series with its own current—limiting resistor.



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#### ACDC02-41CGKWA-F01

Reflow Soldering Profile For Lead-free SMT Process.



NOTES:

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

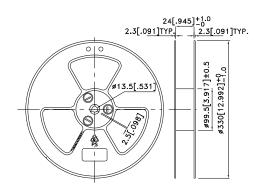
2.Don't cause stress to the epoxy resin while it is exposed to high temperature.

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

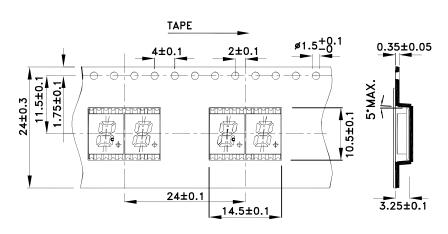
## Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.15)

# 

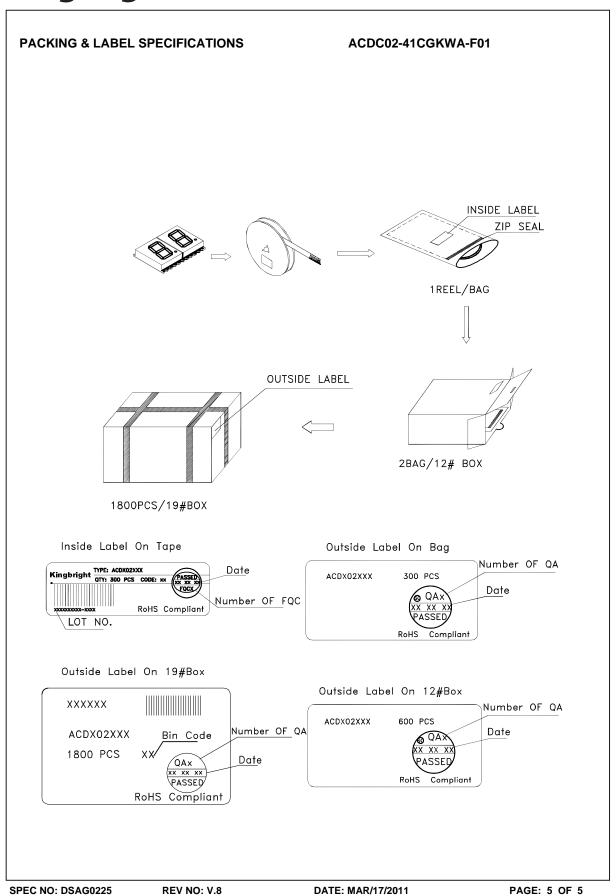
#### **Reel Dimension**



## Tape Specifications (Units: mm)



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