SURFACE MOUNT DISPLAY



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Part Number: ACDA56-41ZGWA-F01 Green

Features

- 0.56 inch digit height.
- Low current operation.
- Excellent character appearance.
- Mechanically rugged.
- Gray face, white segment.
- Package: 200pcs/ reel.
- Moisture sensitivity level : level 2a.
- RoHS compliant.

Description

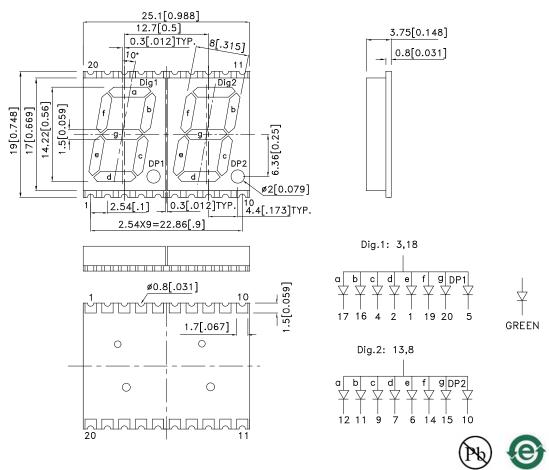
The Green source color devices are made with InGaN on Sapphire Light Emitting Diode.

Static electricity and surge damage the LEDS.

It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.

All devices, equipment and machinery must be electrically grounded.

Package Dimensions& Internal Circuit Diagram



Notes:

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- 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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 CHECKED: Joe Lee
 DRAWN: Q.M.CHEN
 ERP: 1352000565

Selection Guide

Part No.	Dice	Lens Type	lv (ucd) [1] @ 10mA		Description
			Min.	Тур.	
ACDA56-41ZGWA-F01	Green (InGaN)	White Diffused	52000	160000	Common Anode, Rt. Hand Decimal.
			*21000	*51000	

Notes:

- 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	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Green	515		nm	IF=20mA
λD [1]	Dominant Wavelength	Green	525		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Green	30		nm	IF=20mA
С	Capacitance	Green	45		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Green	3.3	4.1	V	IF=20mA
lR	Reverse Current	Green		50	uA	V _R =5V

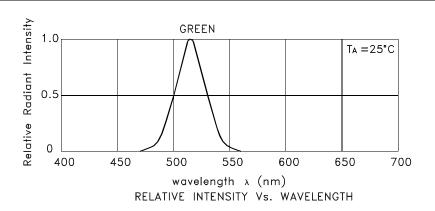
- 1.Wavelength: +/-1nm.
 2. Forward Voltage: +/-0.1V.
 3. Wavelength value is traceable to the CIE127-2007 compliant national standards.

Absolute Maximum Ratings at TA=25°C

Parameter	Green	Units	
Power dissipation	102.5	mW	
DC Forward Current	25	mA	
Peak Forward Current [1]	150	mA	
Reverse Voltage	5	V	
Operating / Storage Temperature	-40°C To +85°C		

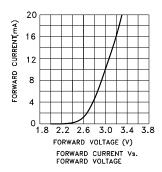
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

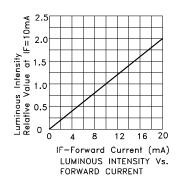
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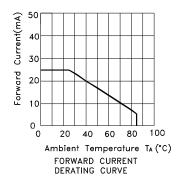


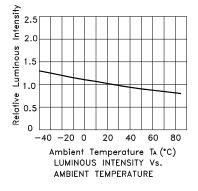
Green

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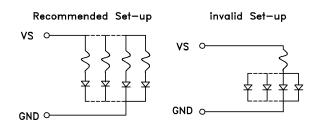






CIRCUIT DESIGN NOTES

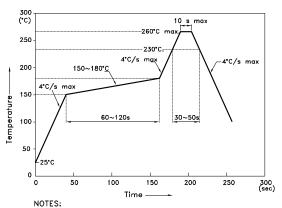
- 1.Protective current—limiting resistors may be necessary to operate the Displays.
- 2.LEDs mounted in parallel should each be placed in series with its own current—limiting resistor.



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Reflow Soldering Profile For Lead-free SMT Process.



- NOTES:

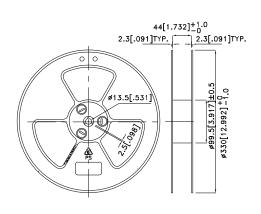
 1.We recommend the reflow temperature 245°C(+/-5°C).The maximum soldering temperature should be limited to 260°C. 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.
 3.Number of reflow process shall be 2 times or less.

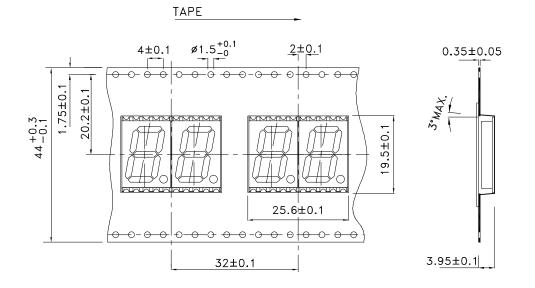
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.15)

2.54X9=22.86 1.7 2.54

Tape Specifications (Units:mm)

Reel Dimension





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PACKING & LABEL SPECIFICATIONS ACDA56-41ZGWA-F01 INSIDE LABEL ZIP SEAL 1REEL/BAG 200PCS/REEL OUTSIDE LABEL 1BAG/12-1# BOX 1000PCS/17#BOX Inside LABEL On Tape Outside LABEL On BAG Number OF QA Kingbright TYPE: ACDx56x OTY: 200 PCS CODE: xx Date ACDx56x 200 PCS Date ® QAX XX XX XX PASSED Number OF FQC RoHS Compliant LOT NO. RoHS Compliant Outside LABEL On 17#Box Outside LABEL On 12-1#Box XXXXXX Number OF QA ACDx56x 200 PCS Number OF QA Date ACDx56x Bin Code QAX XX XX XX (PASSED/ 1000PCS Date QAx

All design applications should refer to Kingbright application notes available at http://www.KingbrightUSA.com/ApplicationNotes

RoHS Compliant

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