

### SURFACE MOUNT DISPLAY

Part Number: KCDA04-123 Green

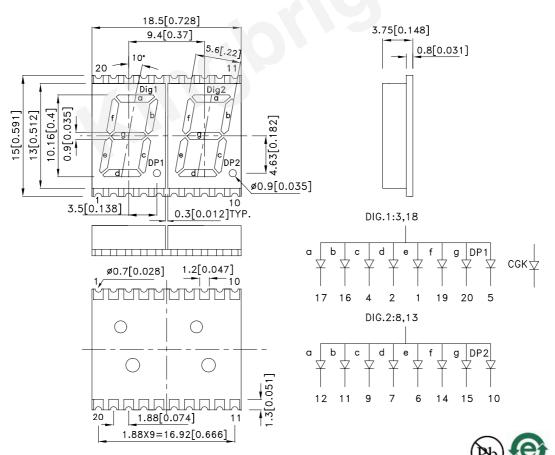
### **Features**

- 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 Green source color devices are made with AlGalnP 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.

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### **Selection Guide**

Part No.	Dice	Lens Type	Iv (ucd) [1] @ 10mA		Description
			Min.	Тур.	2000 i pilon
KCDA04-123	Green (AlGaInP)	White Diffused	5600	11000	Common Anode, Rt. Hand Decimal.
			*2200	*4100	

### 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	574		nm	IF=20mA
λD [1]	Dominant Wavelength	Green	570		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Green	20		nm	IF=20mA
С	Capacitance	Green	15		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Green	2.1	2.5	V	IF=20mA
lr	Reverse Current	Green		10	uA	VR=5V

### Notes:

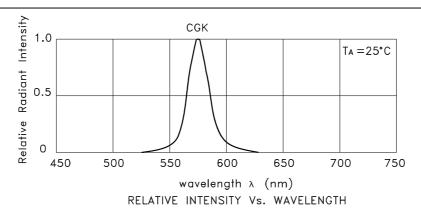
- 1.Wavelength: +/-1nm.
  2. Forward Voltage: +/-0.1V.
  3.Wavelength value is traceable to the CIE127-2007 compliant national standards.

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

Parameter	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			

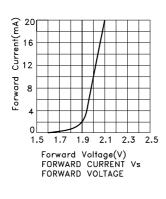
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

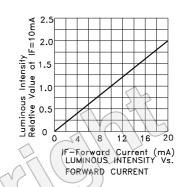
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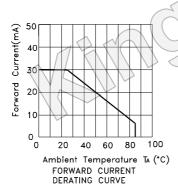


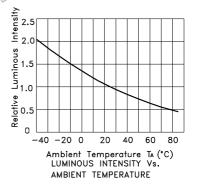
Green

### KCDA04-123



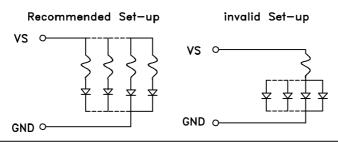






### CIRCUIT DESIGN NOTES

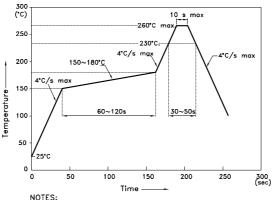
- 1.Protective current—limiting resistors may be necessary to operate the Displays.
- 2.LEDs mounted in parallel should each be placed in series with its own current—limiting resistor.



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### KCDA04-123

Reflow Soldering Profile For Lead-free SMT Process.



- NOTES:

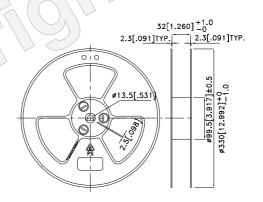
  1.We recommend the reflow temperature 245°C(+/-5°C).The maximum soldering temperature should be limited to 260°C. 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.

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

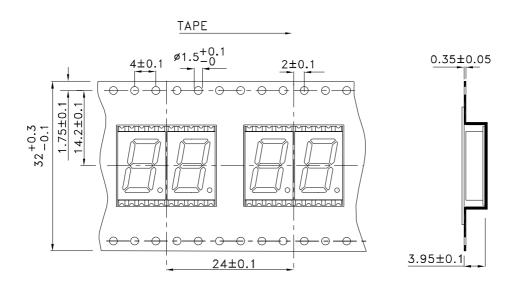
### **Recommended Soldering Pattern** (Units: mm; Tolerance: ± 0.15)

# 1.88X9=16.92 1.88

### **Reel Dimension**



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

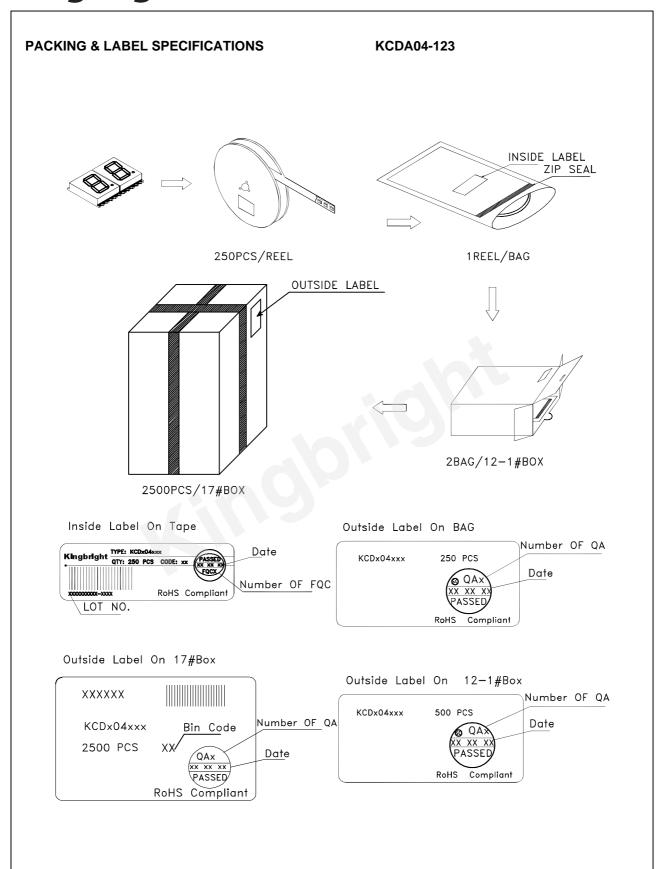


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Detailed application notes are listed on our website. http://www.kingbright.com/application notes

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