

Part Number: KCSA04-123    Green

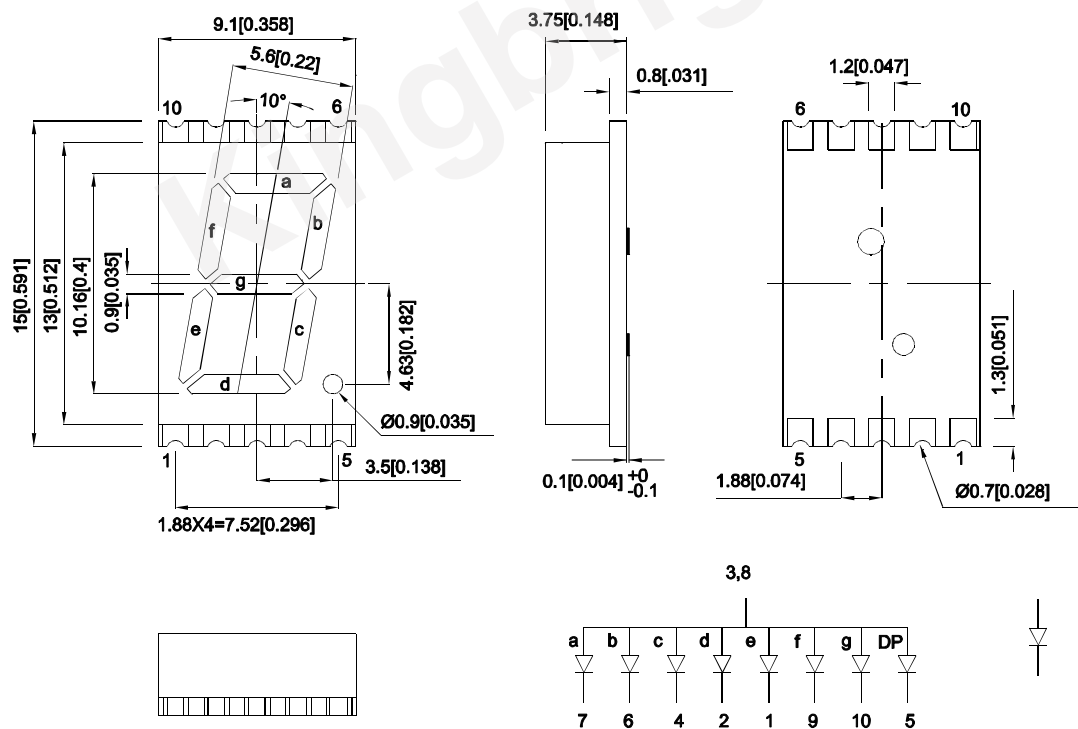
### Features

- 0.4 inch digit height.
- Low current operation.
- Excellent character appearance.
- Mechanically rugged.
- Gray face, white segment.
- Package: 400pcs/ reel.
- 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



#### Notes:

1. All dimensions are in millimeters (inches), Tolerance is  $\pm 0.25$  (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.



## Selection Guide

Part No.	Emitting Color (Material)	Lens Type	Iv (ucd) [1] @ 10mA		Description
			Min.	Typ.	
KCSA04-123	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	Emitting Color	Typ.	Max.	Units	Test Conditions
$\lambda_{peak}$	Peak Wavelength	Green	574		nm	I <sub>F</sub> =10mA
$\lambda_D$ [1]	Dominant Wavelength	Green	570		nm	I <sub>F</sub> =10mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Green	20		nm	I <sub>F</sub> =10mA
C	Capacitance	Green	15		pF	V <sub>F</sub> =0V; f=1MHz
V <sub>F</sub> [2]	Forward Voltage	Green	2.0	2.5	V	I <sub>F</sub> =10mA
I <sub>R</sub>	Reverse Current	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.

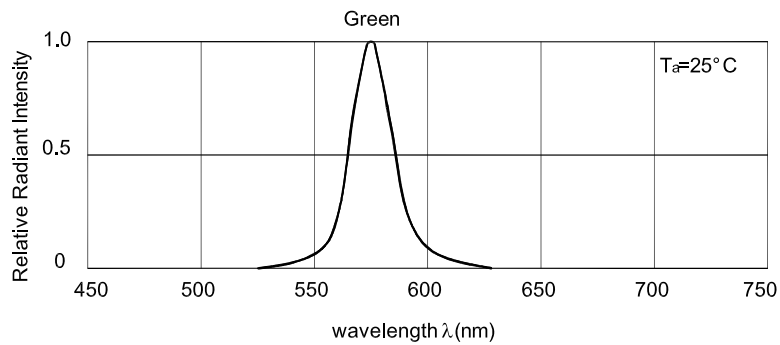
4. Excess driving current and / or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

## Absolute Maximum Ratings at TA=25°C

Parameter	Values	Units
Power dissipation	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	

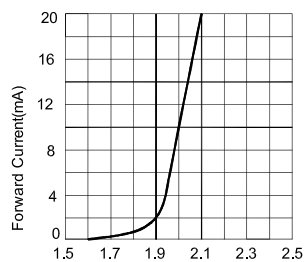
### Note:

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

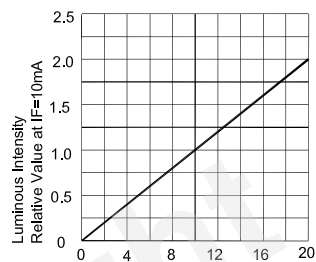


## Green

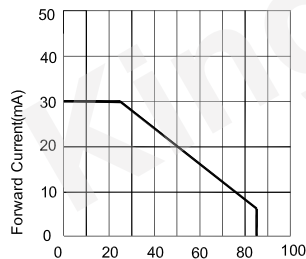
### KCSA04-123



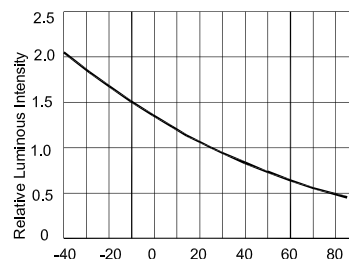
Forward Current Vs.  
Forward Voltage



Luminous Intensity Vs.  
Forward Current



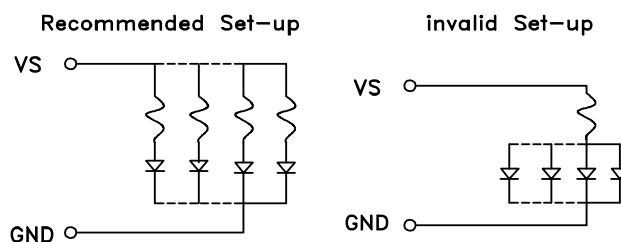
Forward Current  
Derating Curve



Luminous Intensity Vs.  
Ambient Temperature

## CIRCUIT DESIGN NOTES

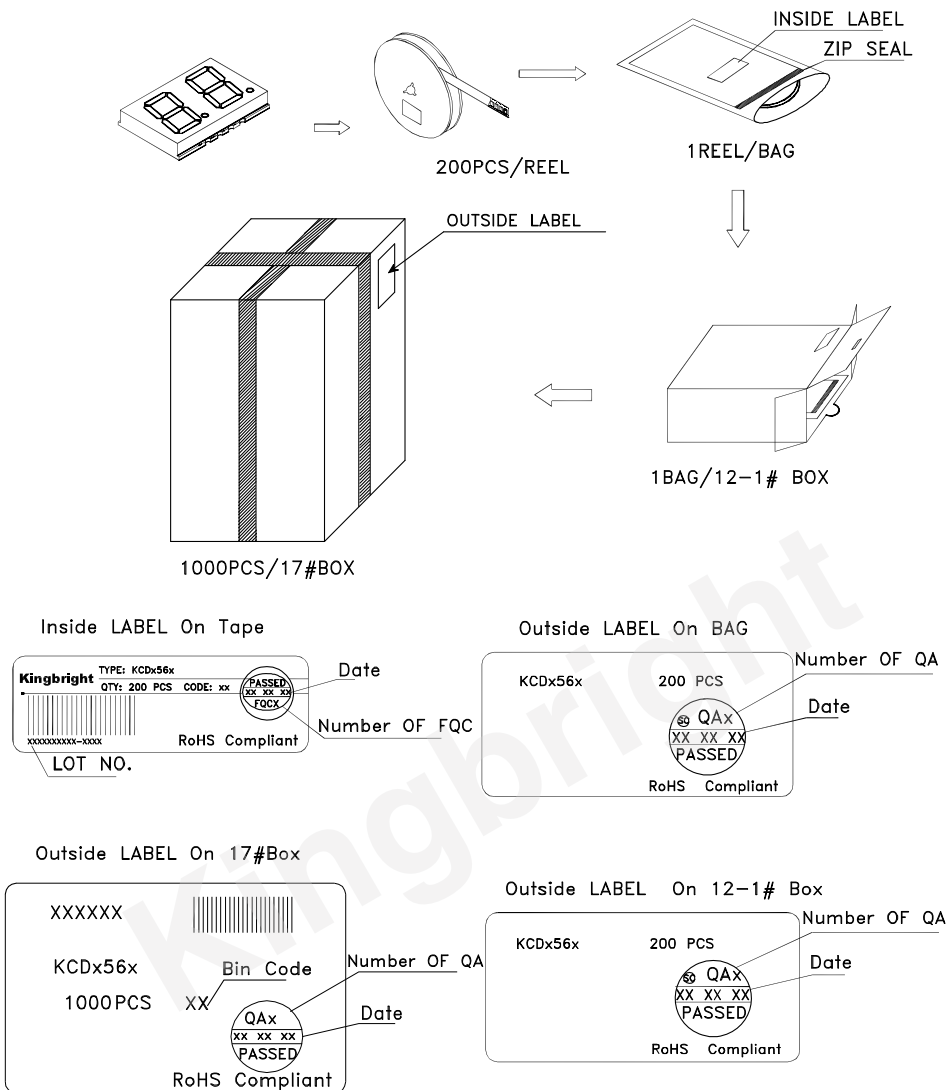
1. Protective current-limiting resistors may be necessary to operate the Displays.
2. LEDs mounted in parallel should each be placed in series with its own current-limiting resistor.





## PACKING & LABEL SPECIFICATIONS

KCSA04-123



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