

### SURFACE MOUNT DISPLAY

Part Number: KCSC02-102

Super Bright Green

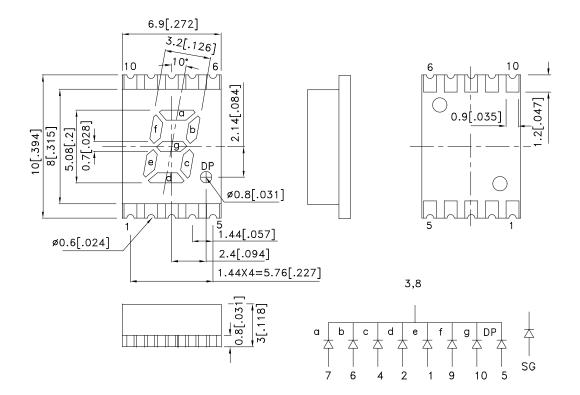
#### **Features**

- 0.2 inch digit height.
- Low current operation.
- Excellent character appearance.
- Mechanically rugged.
- Gray face, white segment.
- Package: 650pcs / 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.

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### **Selection Guide**

Part No.	Dice	Lens Type	lv (ucd) [1] @ 10mA		Description
			Min.	Тур.	
KCSC02-102	Super Bright Green (GaP)	White Diffused	1400	3900	Common Cathode, Rt. Hand Decimal.
			*560	*1400	

### Note:

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

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Green	565		nm	IF=20mA
λD [1]	Dominant Wavelength	Super Bright Green	568		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Super Bright Green	30		nm	IF=20mA
С	Capacitance	Super Bright Green	15		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Super Bright Green	2.2	2.5	V	IF=20mA
lr	Reverse Current	Super Bright 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

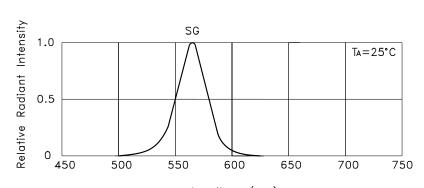
Parameter	Super Bright Green	Units
Power dissipation	62.5	mW
DC Forward Current	25	mA
Peak Forward Current [1]	140	mA
Reverse Voltage	5	V
Operating / Storage Temperature	-40°C To +85°C	

### Note:

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

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<sup>1.</sup> Luminous intensity/ luminous Flux: +/-15%.
\*Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

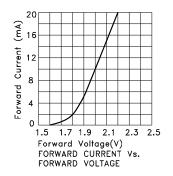


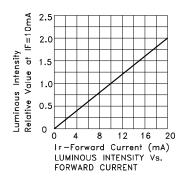
wavelength λ (nm)

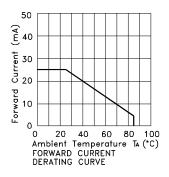
RELATIVE INTENSITY Vs. WAVELENGTH

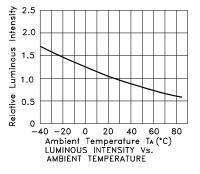
### **Super Bright Green**

### KCSC02-102



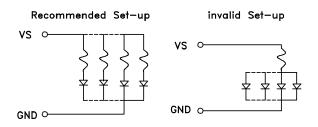






### CIRCUIT DESIGN NOTES

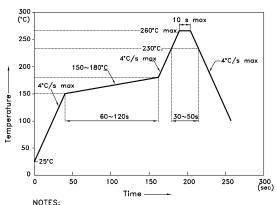
- 1.Protective current—limiting resistors may be necessary to operate the Displays.
- 2.LEDs mounted in parallel should each be placed in series with its own current—limiting resistor.



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#### KCSC02-102

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.

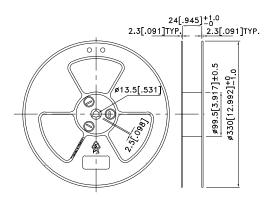
  2.Don't cause stress to the epoxy resin while it is exposed to high temperature.

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

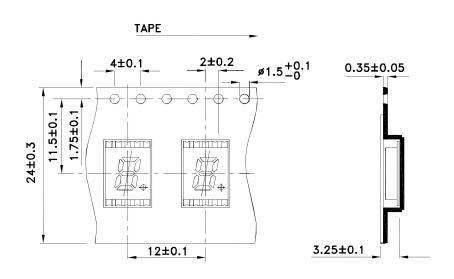
### **Recommended Soldering Pattern** (Units: mm; Tolerance: ± 0.15)

# 1.44X4=5.76 \_1.44 0.9

#### **Reel Dimension**



**Tape Specifications** (Units: mm)

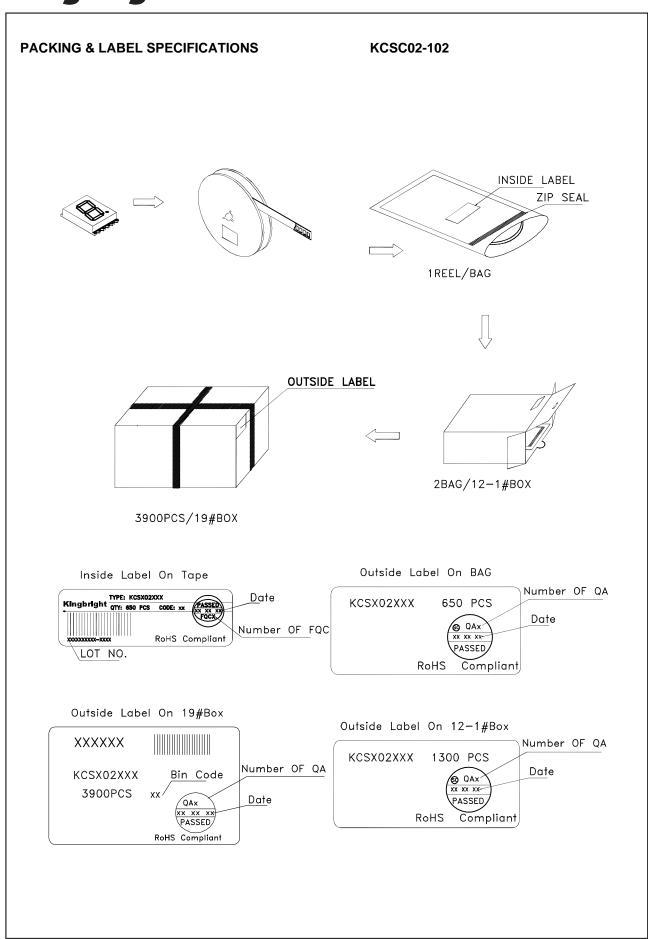


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