

#### SURFACE MOUNT DISPLAY

PRELIMINARY SPEC



ATTENTION **OBSERVE PRECAUTIONS** FOR HANDLING **ELECTROSTATIC** DISCHARGE SENSITIVE **DEVICES** 

Part Number: KCSC04-138

Green

#### **Features**

- 0.4INCH DIGIT HEIGHT.
- LOW CURRENT OPERATION.
- EXCELLENT CHARACTER APPEARANCE.
- I.C. COMPATIBLE.
- MECHANICALLY RUGGED.
- GRAY FACE, WHITE SEGMENT.
- PACKAGE:400PCS/ REEL.
- MOISTURE SENSITIVITY LEVEL: LEVEL 4.
- RoHS COMPLIANT.

#### Description

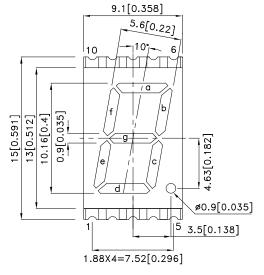
The Green source color devices are made with InGaN on G-SiC Light Emitting Diode.

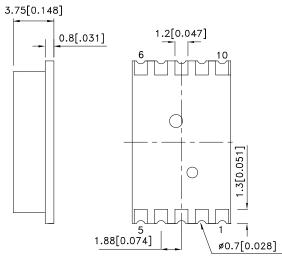
Static electricity and surge damage the LEDS.

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

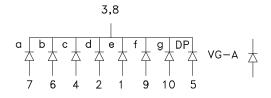
All devices, equipment and machinery must be electrically grounded.

## Package Dimensions& Internal Circuit Diagram









DATE: AUG/25/2007

DRAWN: Y.L.LI

- 1. All dimensions are in millimeters (inches), Tolerance is ±0.25(0.01")unless otherwise noted.
- Specifications are subject to change without notice.
   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.	•
KCSC04-138	Green (InGaN)	WHITE DIFFUSED	18000	55000	Common Cathode, Rt. Hand Decimal.

#### Note:

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

•						
Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Green	520		nm	IF=20mA
λD [1]	Dominant Wavelength	Green	525		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Green	35		nm	IF=20mA
С	Capacitance	Green	100		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Green	3.2	4.0	V	IF=20mA
lr	Reverse Current	Green		10	uA	VR=5V

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

Parameter	Green	Units	
Power dissipation	120	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	100	mA	
Reverse Voltage	5	V	
Operating / Storage Temperature	-40°C To +85°C		

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

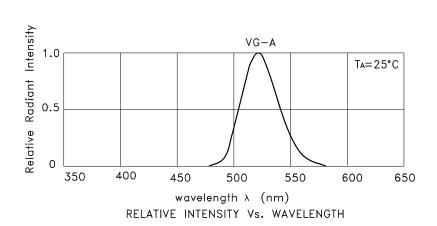
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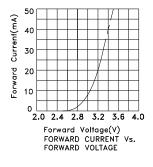
<sup>1.</sup> Luminous intensity/ luminous Flux: +/-15%.

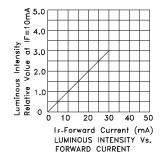
<sup>1.</sup>Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

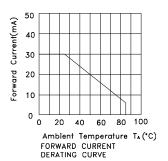
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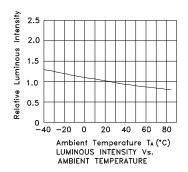


Green KCSC04-138







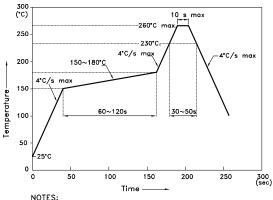


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## KCSC04-138

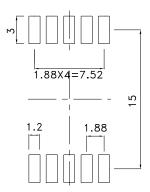
Reflow Soldering Profile For Lead-free SMT Process.



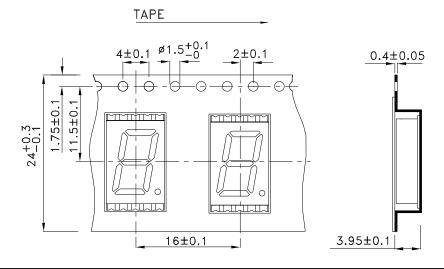
- NOTES:

  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)



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



SPEC NO: DSAH0541 APPROVED: WYNEC

**REV NO: V.3 CHECKED:** Joe Lee DATE: AUG/25/2007 DRAWN: Y.L.LI

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