SURFACE MOUNT DISPLAY

PRELIMINARY SPEC



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

Part Number: KCSC02-138

Features

- 0.2INCH DIGIT HEIGHT.
- LOW CURRENT OPERATION.
- EXCELLENT CHARACTER APPEARANCE.
- I.C. COMPATIBLE
- MECHANICALLY RUGGED.
- GRAY FACE, WHITE SEGMENT.
- PACKAGE: 650PCS/REEL.
- MOISTURE SENSITIVITY LEVEL: LEVEL 4.
- RoHS COMPLIANT.

Description

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

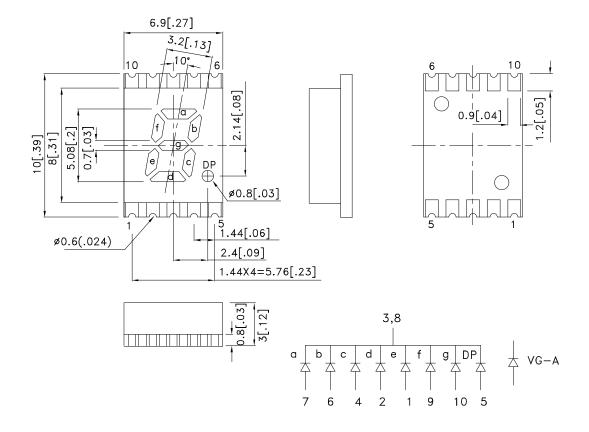
Green

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



- 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.





SPEC NO: DSAH0525 APPROVED: WYNEC

REV NO: V.3 CHECKED: Joe Lee

DATE: SEP/01/2007 DRAWN: Y.L.LI

PAGE: 1 OF 4 ERP: 1351000598

Selection Guide

Part No.	Dice	Lens Type	lv (ucd) [1] @ 10mA		Description
			Min.	Тур.	•
KCSC02-138	Green (InGaN)	WHITE DIFFUSED	8000	30000	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	V _R = 5V

Absolute Maximum Ratings at TA=25°C

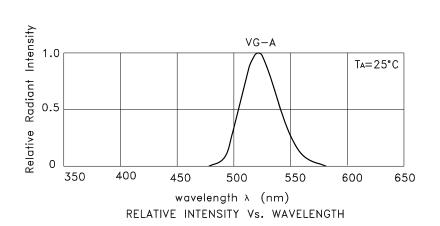
Parameter	Green	Units	
Power dissipation	120	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	100	mA	
Reverse Voltage	5	V	
Operating / Storage Temperature	-40°C To +85°C		

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

SPEC NO: DSAH0525 REV NO: V.3 DATE: SEP/01/2007 PAGE: 2 OF 4 APPROVED: WYNEC **CHECKED:** Joe Lee DRAWN: Y.L.LI ERP: 1351000598

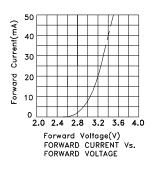
^{1.} Luminous intensity/ luminous Flux: +/-15%.

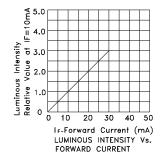
^{1.}Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

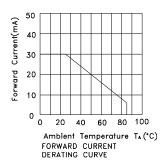


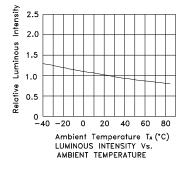
Green

KCSC02-138





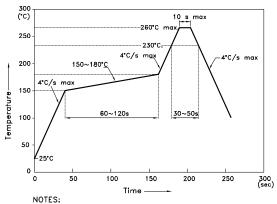




SPEC NO: DSAH0525 APPROVED: WYNEC REV NO: V.3 CHECKED: Joe Lee DATE: SEP/01/2007 DRAWN: Y.L.LI PAGE: 3 OF 4 ERP: 1351000598

KCSC02-138

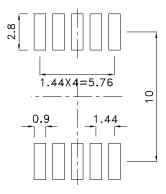
Reflow Soldering Profile For Lead-free SMT Process.



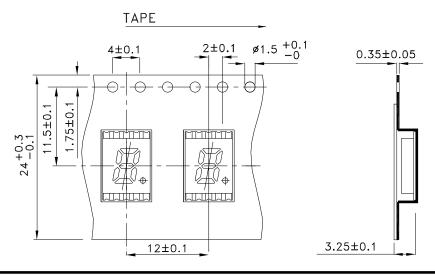
- NOTES:

 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)



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PAGE: 4 OF 4 ERP: 1351000598