#### **SURFACE MOUNT DISPLAY**



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

KPSA03-127

**GREEN** 

#### PRELIMINARY SPEC

#### **Features**

- •0.3 INCH DIGIT HEIGHT.
- •LOW CURRENT OPERATION.
- •EXCELLENT CHARACTER APPEARANCE.
- •I.C. COMPATIBLE.
- •MECHANICALLY RUGGED.
- •GRAY FACE, WHITE SEGMENT.
- •PACKAGE: 550PCS/REEL.
- •Rohs Compliant.

#### Description

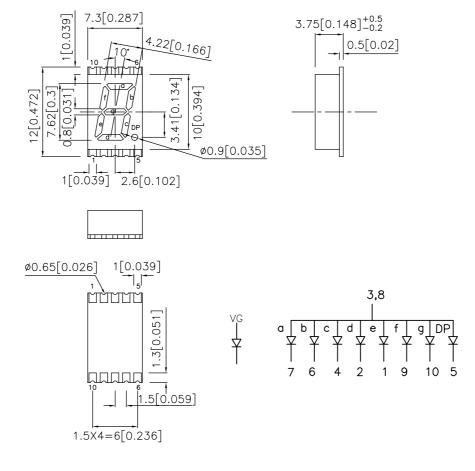
The Green source color devices are made with InGaN on SiC Light Emitting Diode.

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



#### Notes

1. All dimensions are in millimeters (inches), Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.

2. Specifications are subject to change without notice.

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### **Selection Guide**

Part No.	Dice	Lens Type		ucd) 0 mA	Description	
			Min.	Тур.	·	
KPSA03-127	GREEN (InGaN)	WHITE DIFFUSED	4700	23130	Common Anode, Rt. Hand Decimal.	

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

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Green	520		nm	IF=20mA
λD	Dominant Wavelength	Green	525		nm	Ir=20mA
Δλ1/2	Spectral Line Half-width	Green	38		nm	IF=20mA
С	Capacitance	Green	45		pF	VF=0V;f=1MHz
VF	Forward Voltage	Green	3.5	4.5	V	IF=20mA
lr	Reverse Current	Green		10	uA	VR = 5V

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

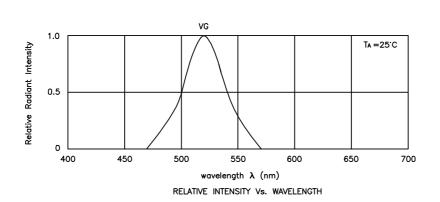
Parameter	Green	Units
Power dissipation	105	mW
DC Forward Current	30	mA
Peak Forward Current [1]	150	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

Note:

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

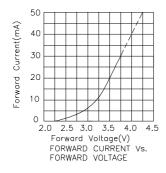
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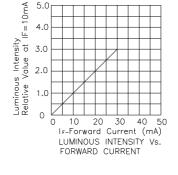
APPROVED: J. Lu CHECKED: Joe Lee

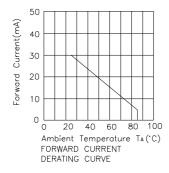


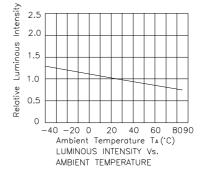
Green

**KPSA03-127** 





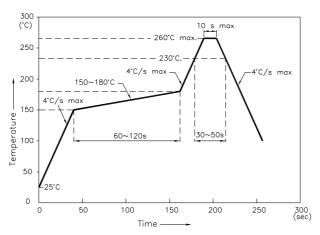




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#### **KPSA03-127**

Reflow Soldering Profile For Lead-free SMT Process.

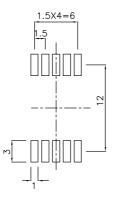


NOTES:

- J.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.

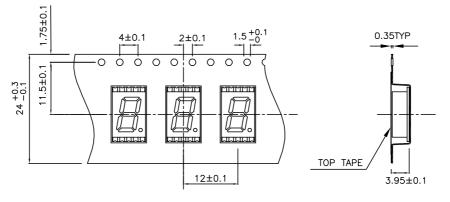
### **Recommended Soldering Pattern**

(Units: mm)



## Tape Specifications (Units: mm)





#### Remarks:

If special sorting is required (e.g. binning based on forward voltage, Luminous intensity/ luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

- 1. Wavelength: +/-1nm
- 2. Luminous intensity/ luminous flux: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

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