#### 3.5x2.0mm SMD CHIP LED LAMP



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

P/N: KPK-3520VGC

**GREEN** 

#### **Features**

- •3.5mmX2.0mm SMT LED, 1.3mm THICKNESS.
- •LOW POWER CONSUMPTION.
- •WIDE VIEWING ANGLE.
- •IDEAL FOR BACKLIGHT AND INDICATOR.
- •VARIOUS COLORS AND LENS TYPES AVAILABLE.
- ●PACKAGE: 2000PCS / REEL.
- ●RoHS COMPLIANT.

### **Description**

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

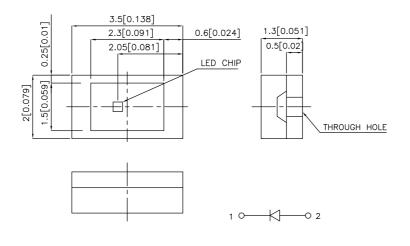
Static electricity and surge damage the LEDS.

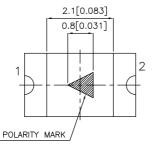
It is recommended to use a wrist band or

anti-electrostatic glove when handling the LEDs.

All devices, equipment and machinery must be electrically grounded.

### **Package Dimensions**





#### Notes:

- All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.2(0.008")$  unless otherwise noted.
- 3. Specifications are subject to change without notice.

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### **Selection Guide**

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
		,	Min.	Тур.	201/2
KPK-3520VGC	GREEN (InGaN)	WATER CLEAR	70	120	120°

## 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

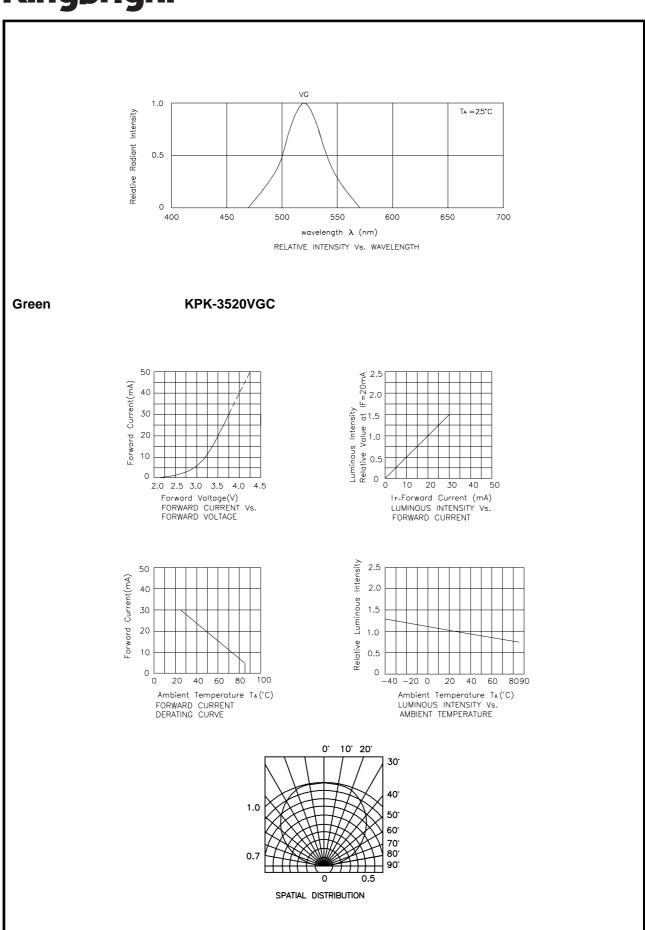
## Absolute Maximum Ratings at Ta=25°C

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	ge Temperature -40°C To +85°C		

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

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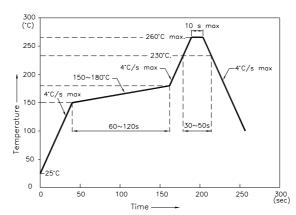
Note:
1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.



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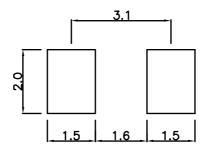
#### KPK-3520VGC

Reflow Soldering Profile For Lead-free SMT Process.

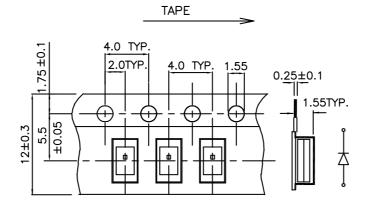


- NOTES: 1.We recommend the reflow temperature 245°C(+/-5°C).The maximum soldering temperature should be limited to 260°C. 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.
  - 3. Number of reflow process shall be 2 times or less.

### **Recommended Soldering Pattern** (Units: mm)



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



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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