

#### 3.2x1.6mm SMD CHIP LED LAMP

Part Number: KP-3216SGC

Super Bright Green

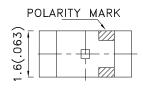
#### **Features**

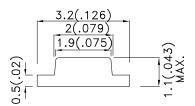
- 3.2mmx1.6mm SMT LED, 1.1mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE: 2000PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.

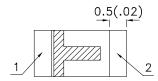
### Description

The Super Bright Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

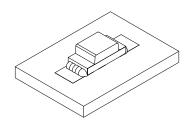
## **Package Dimensions**











- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.2 (0.0079")$  unless otherwise noted.
- Specifications are subject to change without notice.
   The device has a single mounting surface. The device must be mounted according to the specifications.





SPEC NO: DSAA6437 APPROVED: WYNEC

**REV NO: V.10 CHECKED: Allen Liu** 

DATE: JUL/02/2007 DRAWN: Y.L.LI

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# **Selection Guide**

Part No.	Dice	Lens Type	lv (mo @ 20	,	Viewing Angle [1]
		7,1	Min.	Тур.	201/2
KP-3216SGC	Super Bright Green (GaP)	WATER CLEAR	4	15	120°

- Notes: 1.  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value. 2. Luminous intensity/ luminous Flux: +/-15%.

# 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	V <sub>R</sub> =5V

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

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

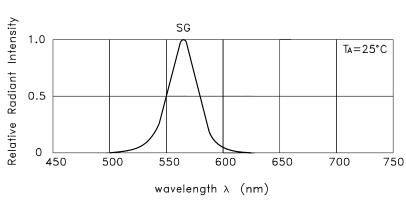
Parameter	Super Bright Green		
Power dissipation	62.5	mW	
DC Forward Current	25	mA	
Peak Forward Current [1]	140	mA	
Reverse Voltage	5	V	
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

### Note:

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

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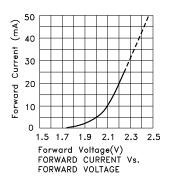
# **Kingbright**

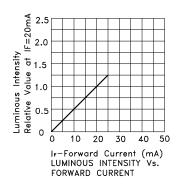


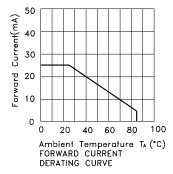
RELATIVE INTENSITY Vs. WAVELENGTH

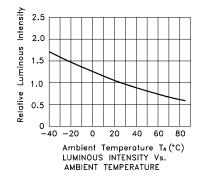
Super Bright Green

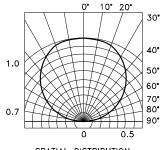
**KP-3216SGC** 











SPATIAL DISTRIBUTION

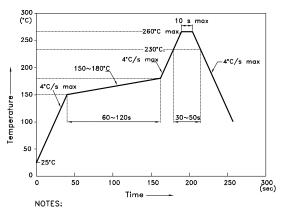
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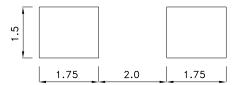
Reflow Soldering Profile For Lead-free SMT Process.



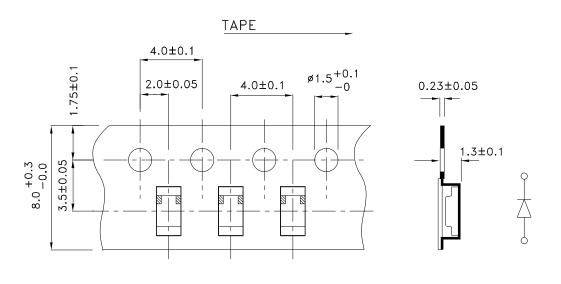
- NOTES:

  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: ± 0.1)



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



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