

### 3.5x2.8mm SURFACE MOUNT LED LAMP

Green



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

Part Number: KA-3528CGCKT

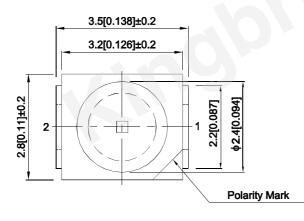
### **Features**

- Single color.
- Suitable for all SMD assembly and solder process.
- Available on tape and reel.
- Ideal for backlighting.
- Package : 2000pcs / reel.
- Moisture sensitivity level : level 3.
- · RoHS compliant.

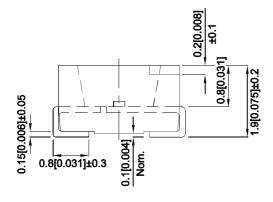
### **Descriptions**

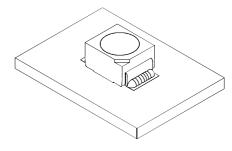
- The Green source color devices are made with AlGaInP on GaAs substrate Light Emitting Diode.
- Electrostatic discharge and power surge could damage the LEDs.
- It is recommended to use a wrist band or antielectrostatic glove when handling the LEDs.
- All devices, equipment and machinery must be electri cally grounded.

### **Package Dimensions**









- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ±0.25(0.01") unless otherwise noted.
- The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
   The device has a single mounting surface. The device must be mounted according to the specifications.

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### **Selection Guide**

Part No.	Emitting Color (Material)	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
		2.	Min.	Тур.	201/2
KA-3528CGCKT	Green (AlGaInP)	Water Clear	40	100	120°

### Notes:

- 1. 01/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
  2. Luminous intensity / luminous Flux: +/-15%.
  3. Luminous intensity value is traceable to CIE127-2007 standards.

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

Symbol	Parameter	Emitting Color	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Green	574		nm	IF=20mA
λD [1]	Dominant Wavelength	Green	570		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Green	20		nm	IF=20mA
С	Capacitance	Green	15		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Green	2.1	2.5	V	IF=20mA
lr	Reverse Current	Green		10	uA	V <sub>R</sub> =5V

- Notes:
  1. Wavelength: +/-1nm.
- 2. Forward Voltage: +/-0.1V.
  3. Wavelength value is traceable to CIE127-2007 standards.
- Excess driving current and / or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

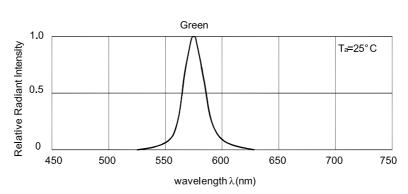
### Absolute Maximum Ratings at TA=25°C

Parameter	Values	Units		
Power dissipation	75	mW		
DC Forward Current	30	mA		
Peak Forward Current [1]	150	mA		
Reverse Voltage	5	V		
Operating Temperature	-40°C To +85°C			
Storage Temperature	-40°C To +85°C			

- Notes:
  1. 1/10 Duty Cycle, 0.1ms Pulse Width.
  2. Relative humidity levels maintained between 40% and 60% in prodCuction area are recommended to avoid the build-up of static electricity Ref JEDEC/JESD625-A and JEDEC/J-STD-033.

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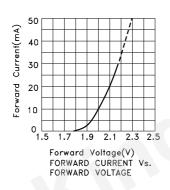
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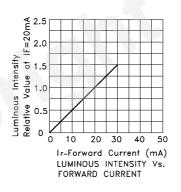


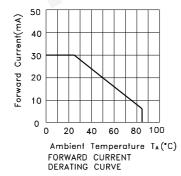
Relative Intensity Vs. Wavelength

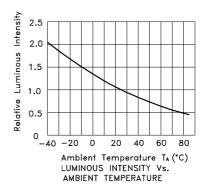
### Green

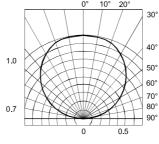
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SPATIAL DISTRIBUTION

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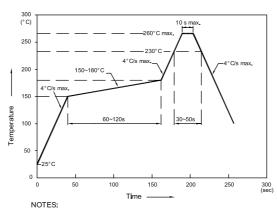
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### KA-3528CGCKT

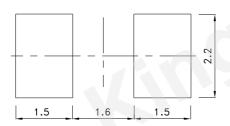
Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.



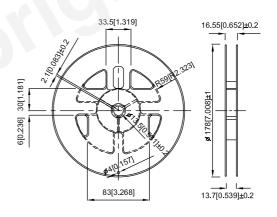
- We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.
- 2.Don't cause stress to the epoxy resin while it is exposed
- to high temperature.
  3.Number of reflow process shall be 2 times or less.

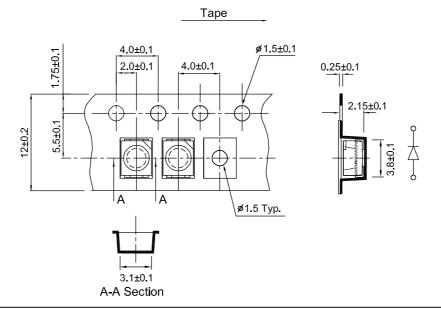
## Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



## Tape Dimensions (Units : mm)

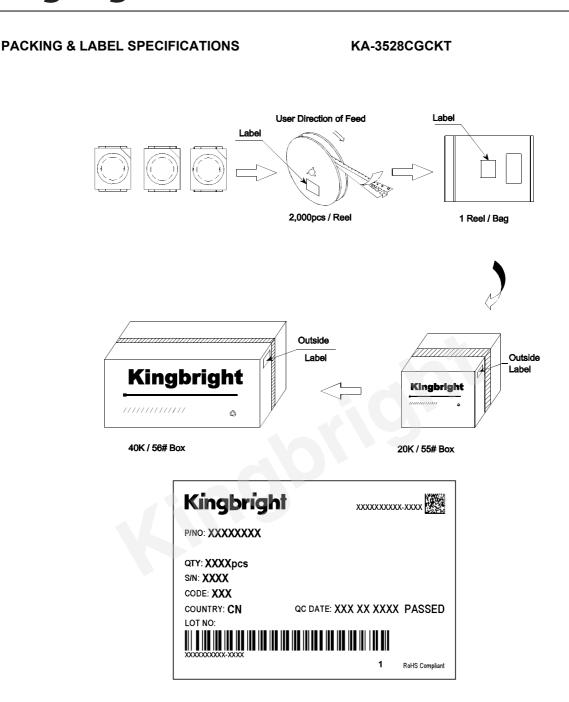
### **Reel Dimension**





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