### 1.0X0.5mm SMD CHIP LED LAMP

Part Number: KPHHS-1005CGCK Green



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

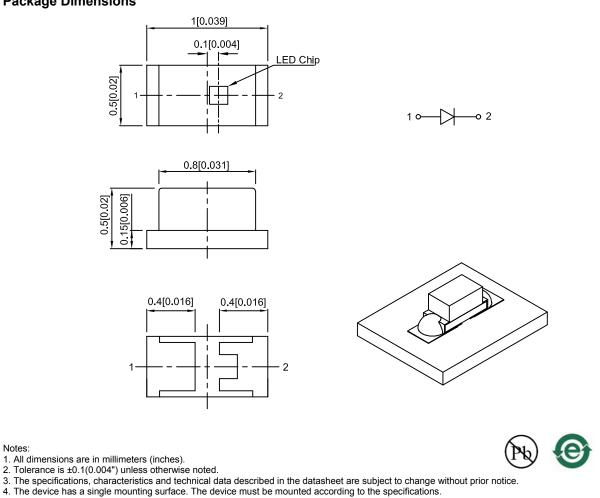
#### **Features**

- 1.0mmx0.5mm SMD LED, 0.5mm thickness.
- Low power consumption.
- · Wide viewing angle.
- Ideal for backlight and indicator.
- 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, equipments and machineries must be electrically grounded.

#### **Package Dimensions**



SPEC NO: DSAC5628 **APPROVED: Wynec** 

REV NO: V.19B **CHECKED:** Allen Liu DATE: JAN/17/2017 DRAWN: W.Q.Zhong PAGE: 1 OF 5 ERP: 1203002672

#### **Selection Guide**

Part No.	Emitting Color (Material)	Lens Type	lv (mcd) [2] @ 20mA				Viewing Angle [1]
			Min.	Тур.	201/2		
KPHHS-1005CGCK	Green (AlGaInP)	Water Clear	20	50	120°		

Notes:

01/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
Luminous intensity / luminous Flux: +/-15%.
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	I⊧=20mA
λD [1]	Dominant Wavelength	Green	570		nm	I⊧=20mA
Δλ1/2	Spectral Line Half-width	Green	20		nm	I⊧=20mA
С	Capacitance	Green	15		pF	VF=0V;f=1MHz
Vf [2]	Forward Voltage	Green	2.1	2.5	V	I⊧=20mA
IR	Reverse Current	Green		10	uA	VR=5V

Notes:

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

3. Wavelength value is traceable to CIE127-2007 standards.

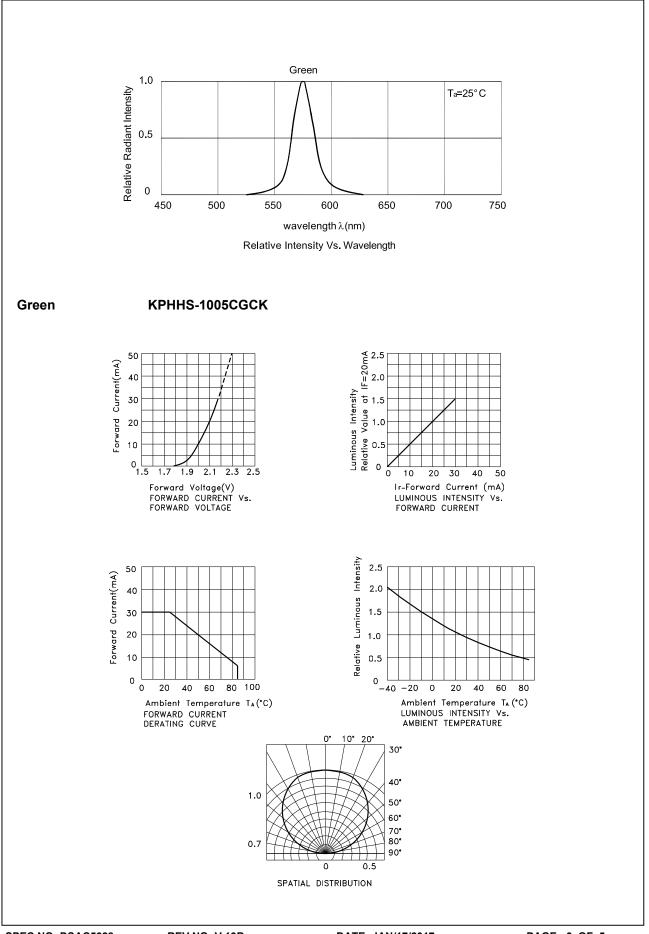
4. Excess driving current and / or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

#### 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:

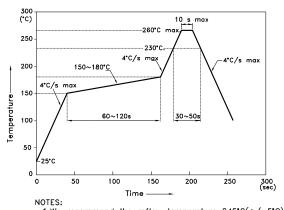
1. 1/10 Duty Cycle, 0.1ms Pulse Width.
Relative humidity levels maintained between 40% and 60% in production area are recommended to avoid the build-up of static electricity – Ref JEDEC/JESD625-A and JEDEC/J-STD-033.



### **KPHHS-1005CGCK**

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.

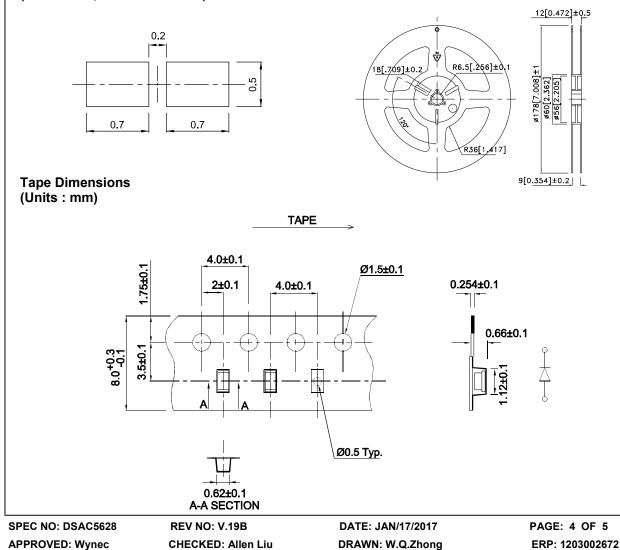
Reflow Soldering Profile For Lead-free SMT Process.

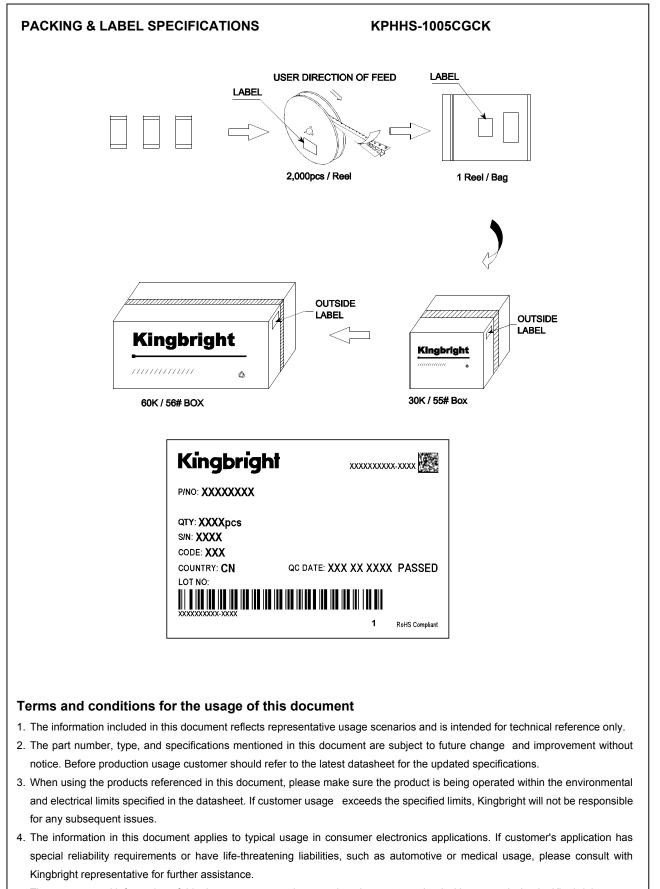


NOTES: 1.We recommend the reflow temperature 245°C(+/-5°C).The maximum soldering temperature should be limited to 260°C. 2.Don't cause stress to the epoxy resin while it is exposed to bit temperature to high temperature. 3.Number of reflow process shall be 2 times or less.



#### **Reel Dimension**





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