

1.0X0.5mm SMD CHIP LED LAMP

Part Number: KPHHS-1005CGCK Green

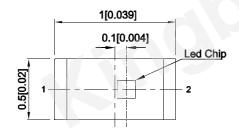
Features

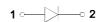
- 1.0mmx0.5mm SMD LED, 0.5mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Package: 2000pcs / reel .
- Moisture sensitivity level : level 3.
- RoHS compliant.

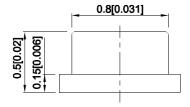
Description

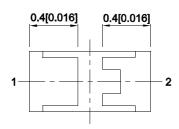
The Green source color devices are made with AlGalnP on GaAs substrate Light Emitting Diode.

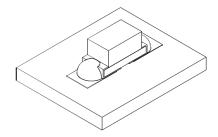
Package Dimensions











- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ±0.1(0.004") 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
KPHHS-1005CGCK	Green (AlGaInP)	Water Clear	20	50	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	Ir=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	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

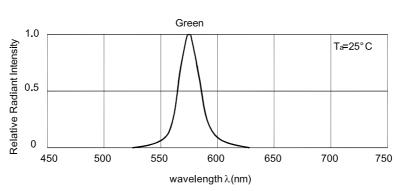
Parameter	Values	Units	
Power dissipation	75	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	150	mA	
Reverse Voltage	5	V	
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

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.

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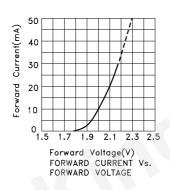
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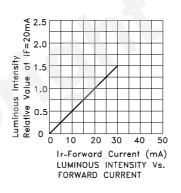


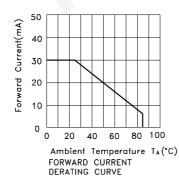
Relative Intensity Vs. Wavelength

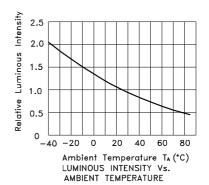
Green

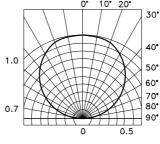
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SPATIAL DISTRIBUTION

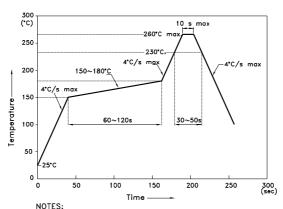
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Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.



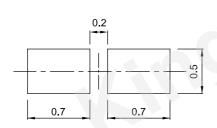
- NOTES:

 1.We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.

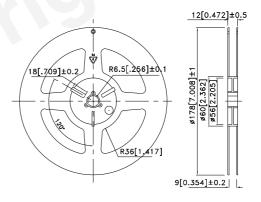
 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.

 3.Number of reflow process shall be 2 times or less.

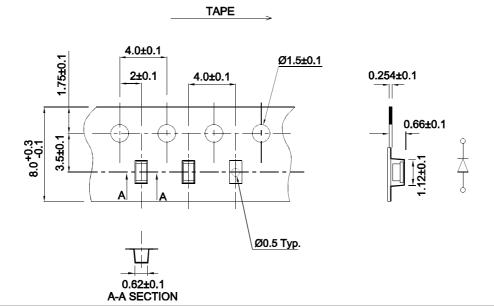
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



Reel Dimension



Tape Dimensions (Units: mm)

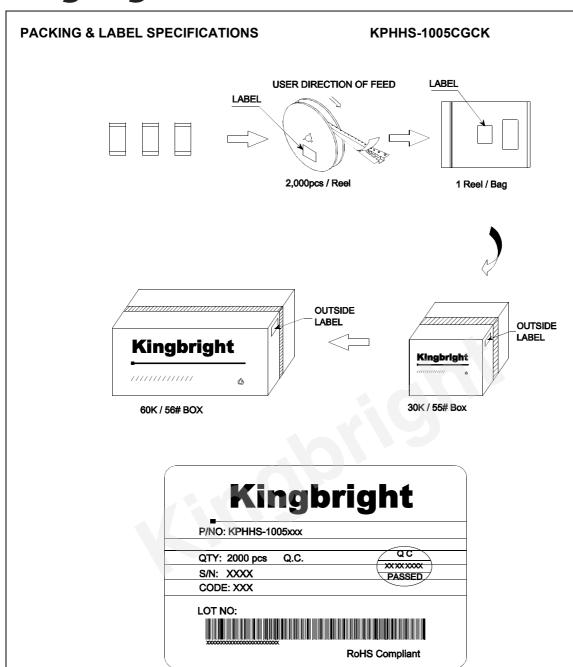


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