

## 2.0x1.25mm SMD CHIP LED LAMP

Part Number: KPT-2012CGCK Green

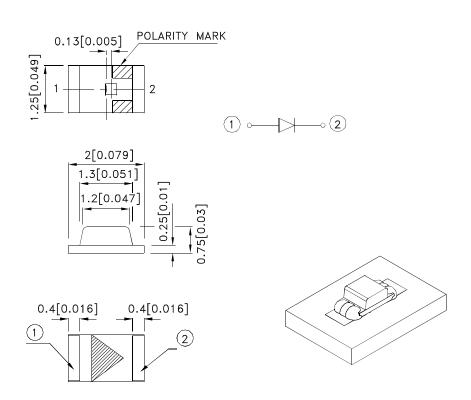
### **Features**

- 2.0mm x1.25mm SMT LED,0.75mm 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 Green source color devices are made with AlGaInP on GaAs substrate Light Emitting Diode.

# **Package Dimensions**



SPEC NO: DSAB0765

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- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.1(0.004")$  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.

REV NO: V.21B

**CHECKED: Allen Liu** 

**DATE: NOV/19/2013** PAGE: 1 OF 5 DRAWN: Q.M.Chen ERP: 1203001794

## **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
		2.	Min.	Тур.	201/2
KPT-2012CGCK	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 the CIE127-2007 compliant national standards.

# Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	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	VR=5V

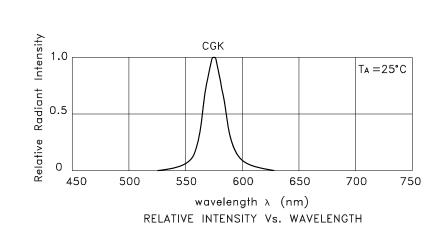
- Notes:
  1.Wavelength: +/-1nm.
  2. Forward Voltage: +/-0.1V.
  3. Wavelength value is traceable to the CIE127-2007 compliant national standards.

# Absolute Maximum Ratings at TA=25°C

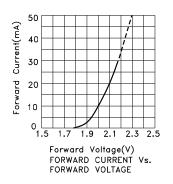
Parameter	Green		
Power dissipation	75	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	150	mA	
Reverse Voltage	5	V	
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

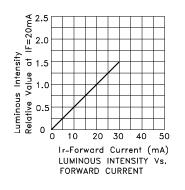
Note: 1. 1/10 Duty Cycle, 0.1ms Pulse Width.

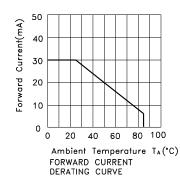
SPEC NO: DSAB0765 REV NO: V.21B **DATE: NOV/19/2013** PAGE: 2 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: Q.M.Chen ERP: 1203001794

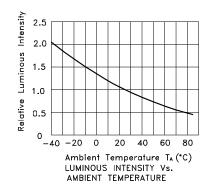


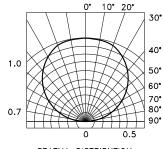
Green KPT-2012CGCK











SPATIAL DISTRIBUTION

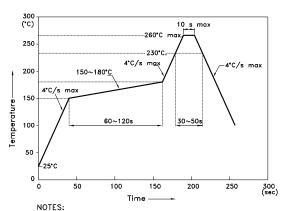
 SPEC NO: DSAB0765
 REV NO: V.21B
 DATE: NOV/19/2013
 PAGE: 3 OF 5

 APPROVED: WYNEC
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### KPT-2012CGCK

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.

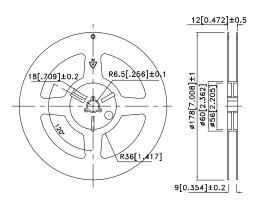
  2.Don't cause stress to the epoxy resin while it is exposed to high temperature.

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

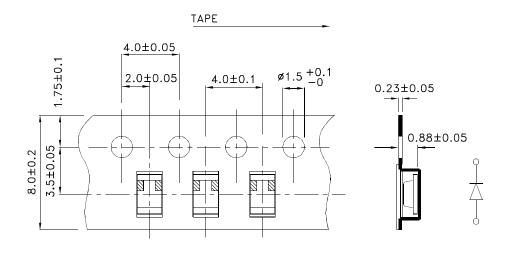
# **Recommended Soldering Pattern** (Units: mm; Tolerance: ± 0.1)



## **Reel Dimension**



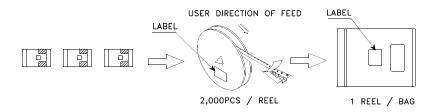
**Tape Dimensions** (Units: mm)

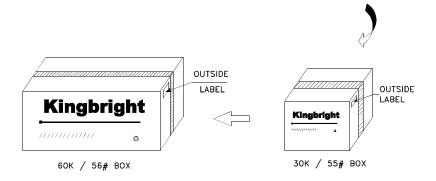


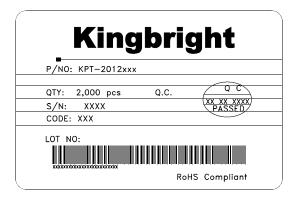
SPEC NO: DSAB0765 **REV NO: V.21B DATE: NOV/19/2013** PAGE: 4 OF 5 **APPROVED: WYNEC CHECKED: Allen Liu** DRAWN: Q.M.Chen ERP: 1203001794

### **PACKING & LABEL SPECIFICATIONS**

### KPT-2012CGCK







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 SPEC NO: DSAB0765
 REV NO: V.21B
 DATE: NOV/19/2013
 PAGE: 5 OF 5

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