

### 1.6X0.8mm SMD CHIP LED LAMP

PRELIMINARY SPEC

Part Number: KP-1608LCGCK

GREEN

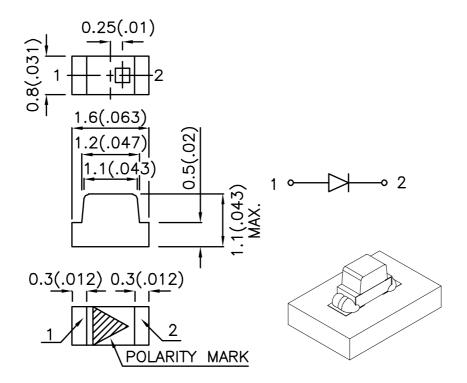
#### **Features**

- •1.6mmX0.8mm 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.
- •LOW CURRENT IF=2mA OPERATING.
- •MOISTURE SENSITIVITY LEVEL: LEVEL 3.
- •RoHS COMPLIANT.

### **Description**

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

# **Package Dimensions**



#### Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.1(0.004")$  unless otherwise noted.
- 3. Specifications are subject to change without notice.
- 4. The device has a single mounting surface. The device must be mounted according to the specifications.





SPEC NO: DSAE7434 REV NO: V.3 DATE: MAY/28/2007 PAGE: 1 OF 4
APPROVED: WYNEC CHECKED: Allen Liu DRAWN: W.J.ZHU

# **Kingbright**

### **Selection Guide**

Part No.	Dice	Lens Type	Iv (mo @ 2		Viewing Angle [1]
			Min.	Тур.	201/2
KP-1608LCGCK	GREEN (InGaAIP)	WATER CLEAR	0.7	3	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	Green	574		nm	IF=2mA
λD [1]	Dominant Wavelength	Green	570		nm	IF=2mA
Δλ1/2	Spectral Line Half-width	Green	20		nm	IF=2mA
С	Capacitance	Green	15		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Green	1.9	2.5	V	IF=2mA
lr	Reverse Current	Green		10	uA	VR = 5V

#### Notes:

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

## Absolute Maximum Ratings at TA=25°C

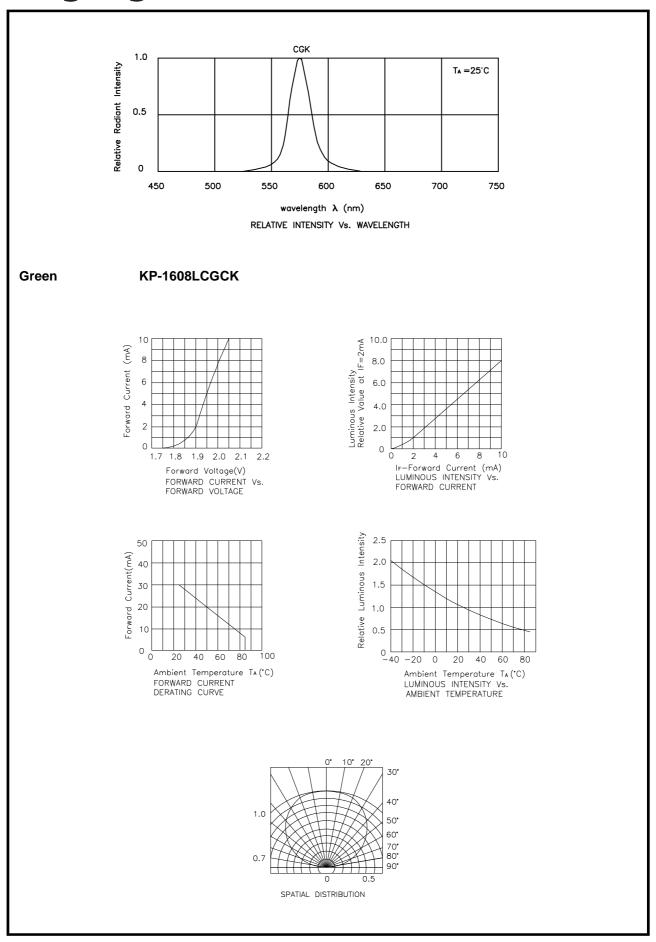
Parameter	Green	Units	
Power dissipation	75	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	150	mA	
Reverse Voltage	5	V	
Operating/Storage Temperature	-40°C To +85°C		

#### Note

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

SPEC NO: DSAE7434 REV NO: V.3 DATE: MAY/28/2007 PAGE: 2 OF 4
APPROVED: WYNEC CHECKED: Allen Liu DRAWN: W.J.ZHU

# **Kingbright**

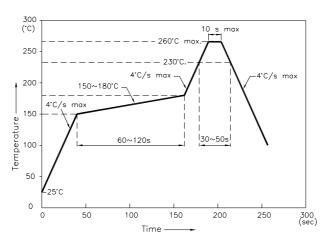


SPEC NO: DSAE7434 REV NO: V.3 DATE: MAY/28/2007 PAGE: 3 OF 4
APPROVED: WYNEC CHECKED: Allen Liu DRAWN: W.J.ZHU

# **Kingbright**

## KP-1608LCGCK

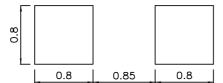
Reflow Soldering Profile For Lead-free SMT Process.



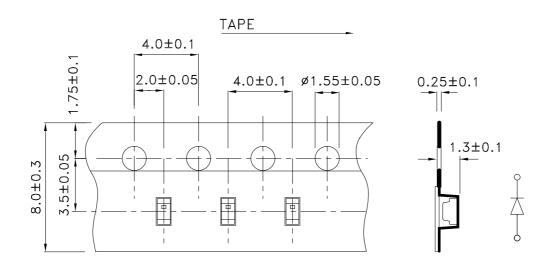
NOTES:

- 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)



SPEC NO: DSAE7434 APPROVED: WYNEC REV NO: V.3 CHECKED: Allen Liu DATE: MAY/28/2007 DRAWN: W.J.ZHU PAGE: 4 OF 4