# 1.6X0.8mm SMD CHIP LED LAMP

KP-1608YC YELLOW

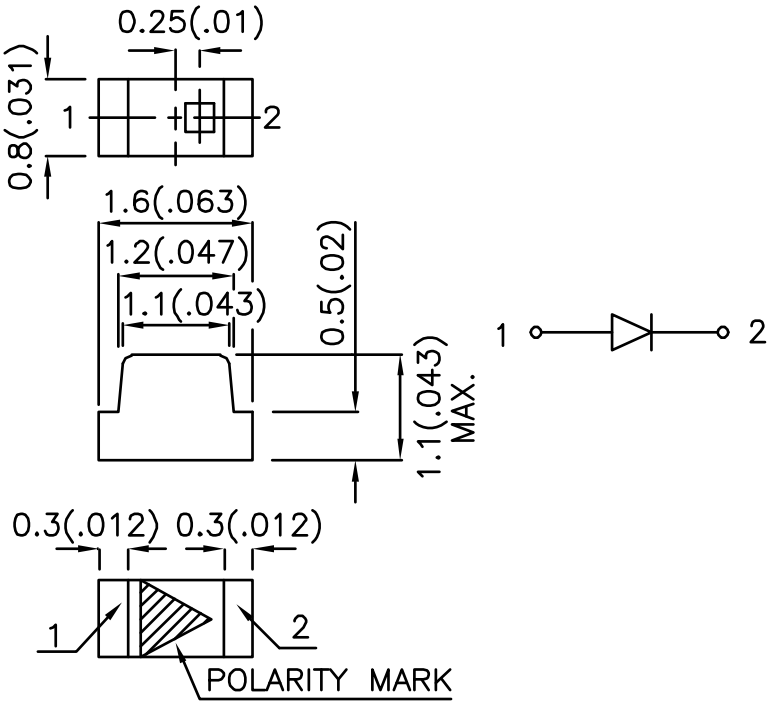
## Features

- 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 .
- RoHS COMPLIANT.

## Description

The Yellow source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Yellow Light Emitting Diode.

## Package Dimensions




Notes:
1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.1(0.004") unless otherwise noted.
3.Specifications are subject to change without notice.

Kingbright

## Selection Guide

| Part No. | Dice | Lens Type | Iv (mcd) @ 20mA | | Viewing Angle |
|---|---|---|---|---|---|
| | | | Min. | Typ. | 2θ1/2 |
| KP-1608YC | YELLOW (GaAsP/GaP) | WATER CLEAR | 2.6 | 8 | 120° |

Note:
1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

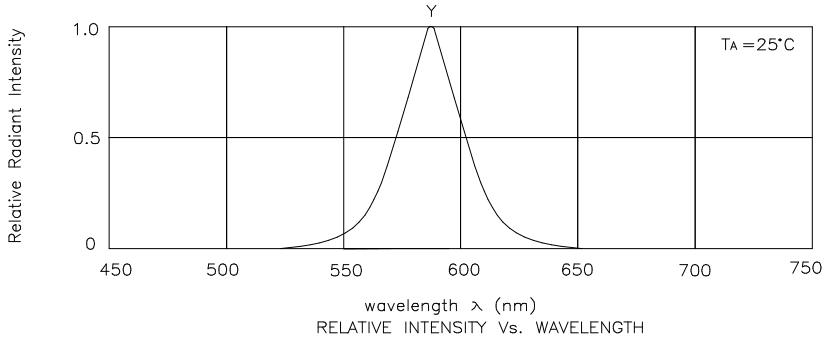
## Electrical / Optical Characteristics at $T_A$=25°C

| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|---|---|---|---|---|---|---|
| λpeak | Peak Wavelength | Yellow | 590 | | nm | $I_F$=20mA |
| λD | Dominant Wavelength | Yellow | 588 | | nm | $I_F$=20mA |
| Δλ1/2 | Spectral Line Half-width | Yellow | 35 | | nm | $I_F$=20mA |
| C | Capacitance | Yellow | 20 | | pF | $V_F$=0V;f=1MHz |
| $V_F$ | Forward Voltage | Yellow | 2.1 | 2.5 | V | $I_F$=20mA |
| $I_R$ | Reverse Current | Yellow | | 10 | uA | $V_R$ = 5V |

## Absolute Maximum Ratings at $T_A$=25°C

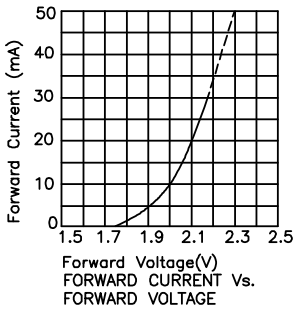
| Parameter | Yellow | Units |
|---|---|---|
| Power dissipation | 105 | mW |
| DC Forward Current | 30 | mA |
| Peak Forward Current [1] | 140 | mA |
| Reverse Voltage | 5 | V |
| Operating/Storage Temperature | -40°C To +85°C | |

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

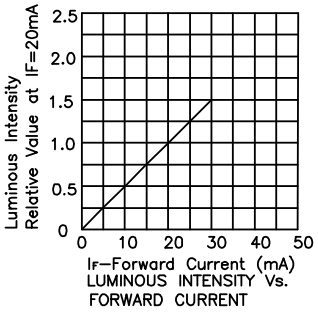


RELATIVE INTENSITY Vs. WAVELENGTH

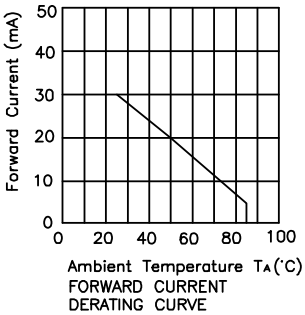
**Yellow** **KP-1608YC**



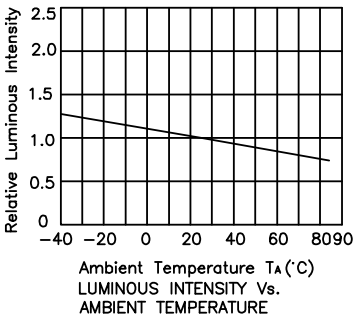
FORWARD CURRENT Vs.
FORWARD VOLTAGE



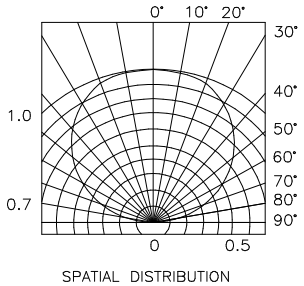
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



FORWARD CURRENT
DERATING CURVE



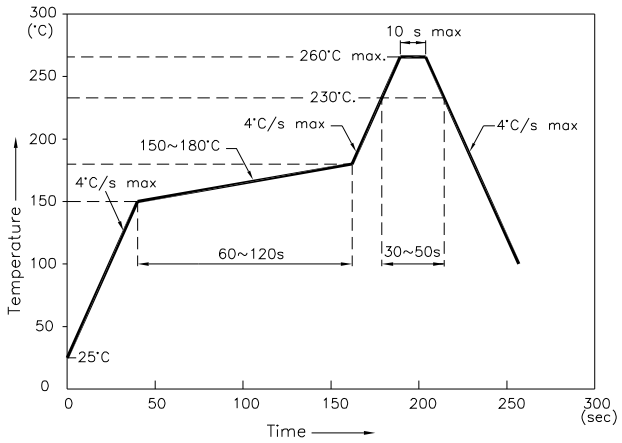
LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

**KP-1608YC**

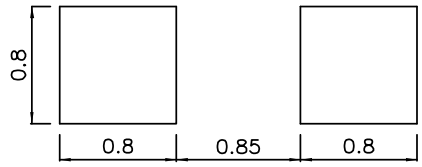
Reflow Soldering Profile For Lead-free SMT Process.



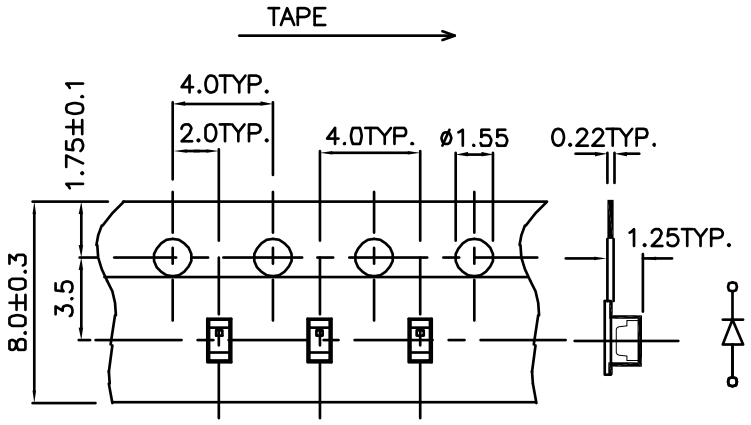

NOTES:

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)**




**Tape Specifications**
**(Units : mm)**




If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm
2. Luminous Intensity: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.