

#### 2.0x1.25mm SMD CHIP LED LAMP

Part Number: KP-2012YC

YELLOW

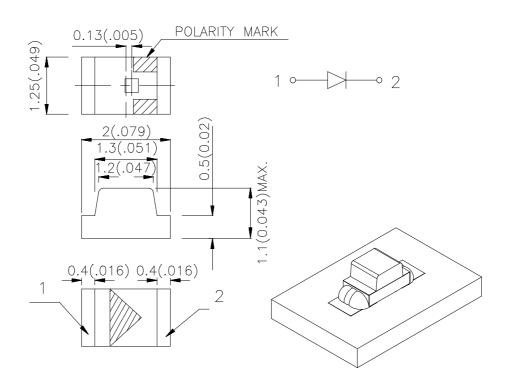
#### **Features**

- •2.0mmx1.25mm 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.
- •MOISTURE SENSITIVITY LEVEL: LEVEL 3.
- •Rohs Compliant.

#### **Description**

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

#### **Package Dimensions**



#### Notes

- 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.





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APPROVED: J. Lu

CHECKED: Allen Liu

DRAWN: Y.L.LI

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#### **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Тур.	201/2
KP-2012YC	YELLOW (GaAsP/GaP)	WATER CLEAR	2.6	8	120°

- 1. θ1/2 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	Yellow	590		nm	IF=20mA
λD [1]	Dominant Wavelength	Yellow	588		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Yellow	35		nm	IF=20mA
С	Capacitance	Yellow	20		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Yellow	2.1	2.5	V	IF=20mA
lr	Reverse Current	Yellow		10	uA	VR = 5V

#### Notes:

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

### Absolute Maximum Ratings at Ta=25°C

Parameter	Yellow	Units
Power dissipation	75	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:

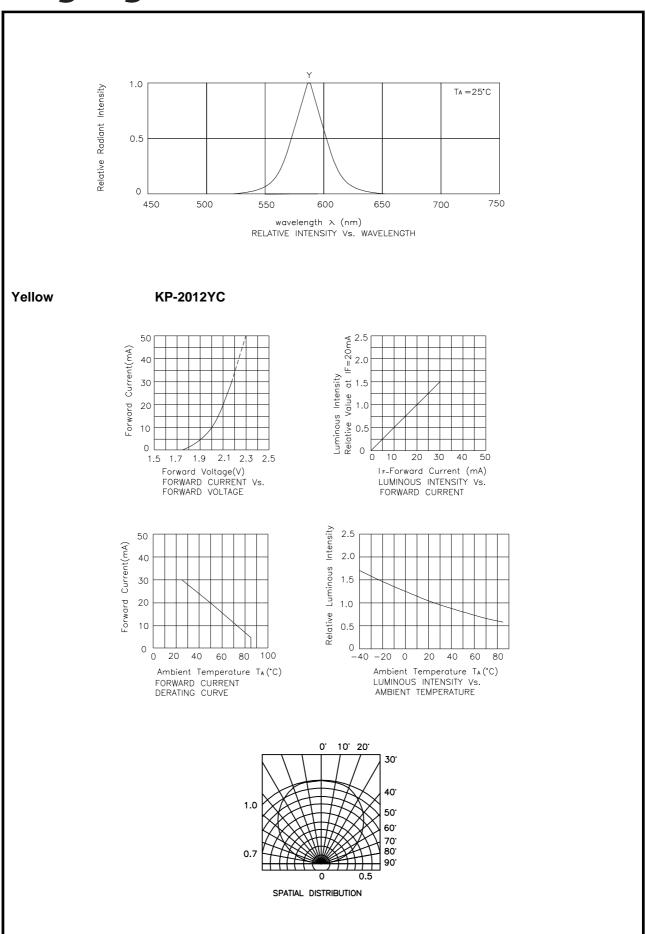
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

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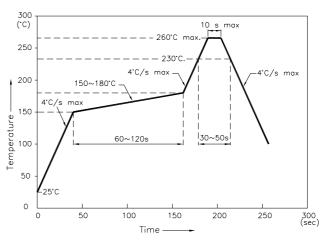


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#### **KP-2012YC**

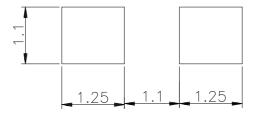
Reflow Soldering Profile For Lead-free SMT Process.



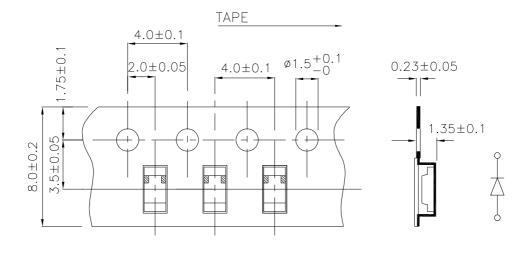
NOTES:

- 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)



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