

KPT-2012SYC SUPER BRIGHT YELLOW

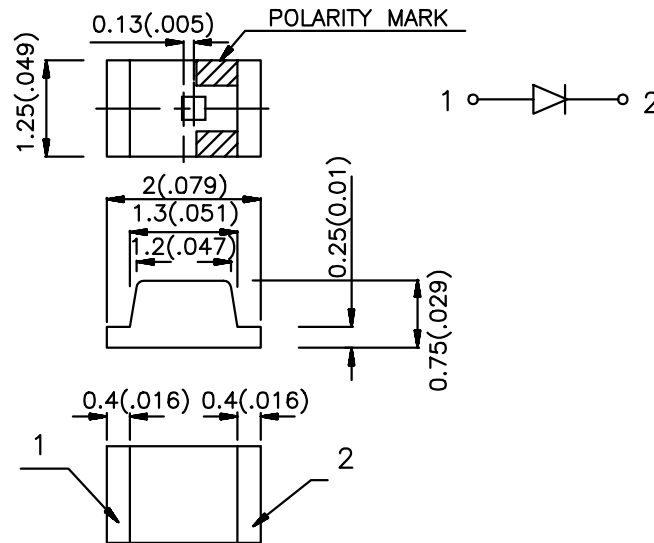
### Features

- 2.0mmx1.2mm 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.

### Description

The Super Bright Yellow source color devices are made with DH InGaAlP 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. Lead spacing is measured where the lead emerge package.
4. Specifications are subject to change without notice.

## Selection Guide

| Part No.    | Dice                          | Lens Type   | Iv (mcd)<br>@ 20 mA |      | Viewing<br>Angle |
|-------------|-------------------------------|-------------|---------------------|------|------------------|
|             |                               |             | Min.                | Typ. | θ1/2             |
| KPT-2012SYC | SUPER BRIGHT YELLOW (InGaAlP) | WATER CLEAR | 40                  | 80   | 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<sub>A</sub>=25°C

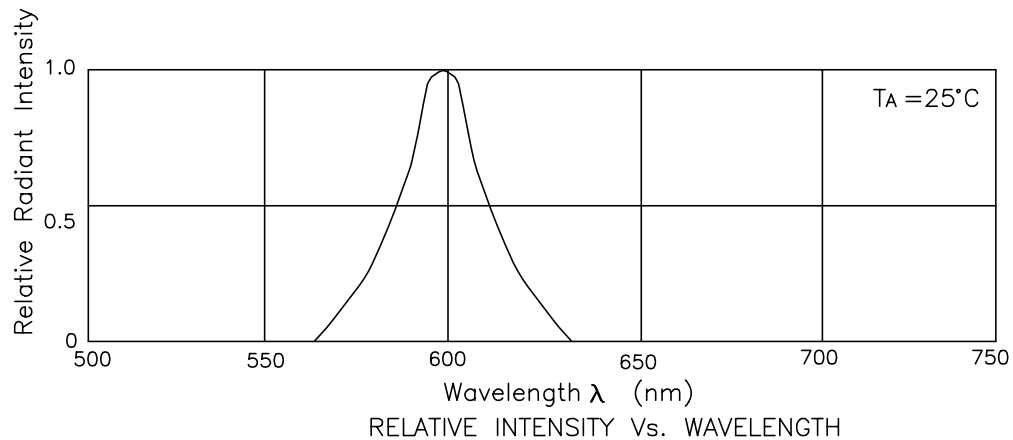
| Symbol            | Parameter               | Device              | Typ. | Max. | Units | Test Conditions |
|-------------------|-------------------------|---------------------|------|------|-------|-----------------|
| λ <sub>peak</sub> | Peak Wavelength         | Super Bright Yellow | 590  |      | nm    | IF=20mA         |
| λ <sub>D</sub>    | Dominate Wavelength     | Super Bright Yellow | 588  |      | nm    | IF=20mA         |
| Δ1/2              | Spectral Line Halfwidth | Super Bright Yellow | 28   |      | nm    | IF=20mA         |
| C                 | Capacitance             | Super Bright Yellow | 25   |      | pF    | VF=0V;f=1MHz    |
| V <sub>F</sub>    | Forward Voltage         | Super Bright Yellow | 2.0  | 2.5  | V     | IF=20mA         |
| I <sub>R</sub>    | Reverse Current         | All                 |      | 10   | uA    | VR = 5V         |

## Absolute Maximum Ratings at T<sub>A</sub>=25°C

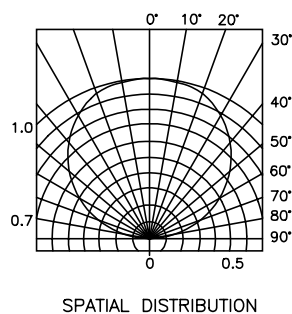
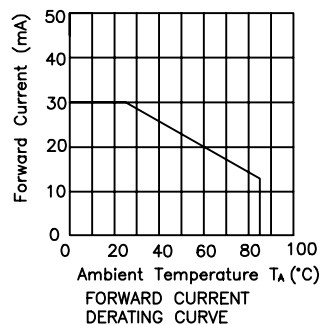
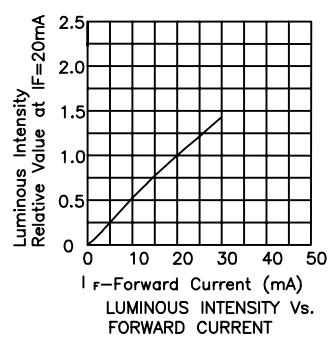
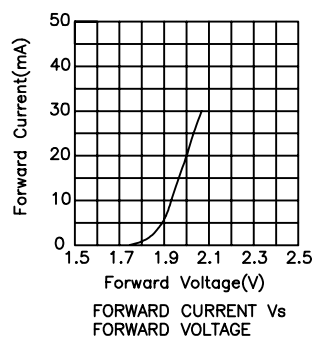
| Parameter                     | Super Bright Yellow | Units |
|-------------------------------|---------------------|-------|
| Power dissipation             | 125                 | mW    |
| DC Forward Current            | 30                  | mA    |
| Peak Forward Current [1]      | 175                 | mA    |
| Reverse Voltage               | 5                   | V     |
| Operating/Storage Temperature | -40°C To +85°C      |       |

Notes:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 4mm below package base.

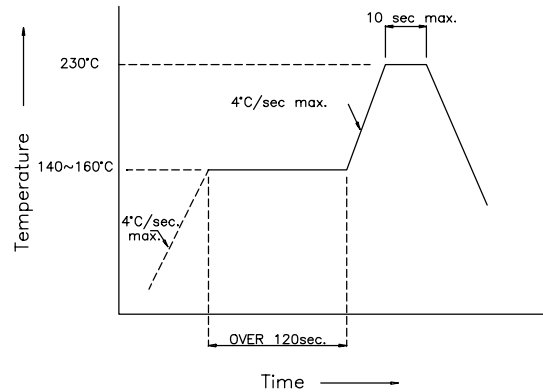


## Super Bright Yellow KPT-2012SYC

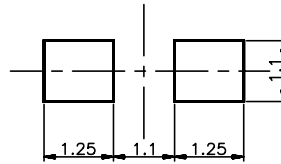


## KPT-2012SYC SMT Reflow Soldering Instructions

Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and second soldering process."



## KPT-2012SYC Recommended Soldering Pattern (Units : mm)



## KPT-2012SYC Tape Specifications (Units : mm)

