

Features

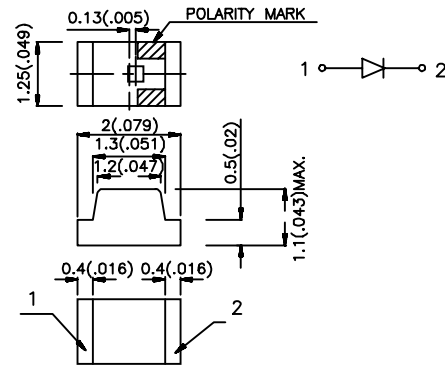
- 2.0mmx1.2mm SMT LED, 1.1mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.

KP-2012SYC SUPER BRIGHT YELLOW
 KP-2012SYCK SUPER BRIGHT YELLOW

Package Dimensions

Description

The Super Bright Yellow source color devices are made with DH InGaAlP on GaAs substrate Light Emitting Diode.



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.1 (0.004") unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subjected to change without notice.

Selection Guide

| Part No. | Dice | Lens Type | Iv (mcd) @ 20 mA | | Viewing Angle |
|-------------|-------------------------------|-------------|---------------------|------|------------------|
| | | | Min. | Typ. | $\theta_{1/2}$ |
| KP-2012SYC | SUPER BRIGHT YELLOW (InGaAlP) | WATER CLEAR | 40 | 60 | 120° |
| KP-2012SYCK | SUPER BRIGHT YELLOW (InGaAlP) | WATER CLEAR | 30 | 50 | 120° |

Note:

1. $\theta_{1/2}$ 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

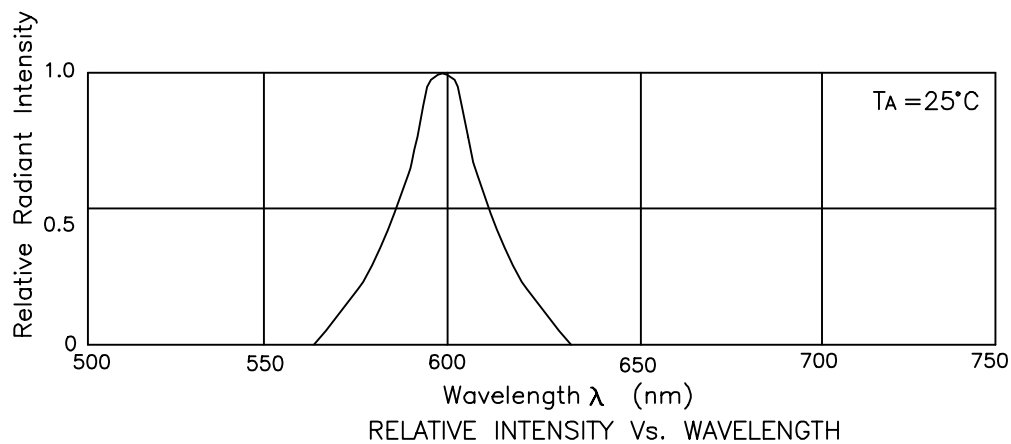
| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|-------------------------|-------------------------|---------------------|------|------|-------|-----------------|
| λ_{peak} | Peak Wavelength | Super Bright Yellow | 590 | | nm | IF=20mA |
| $\Delta\lambda_{1/2}$ | Spectral Line Halfwidth | Super Bright Yellow | 20 | | nm | IF=20mA |
| C | Capacitance | Super Bright Yellow | 33 | | pF | VF=0V;f=1MHz |
| V _F | Forward Voltage | Super Bright Yellow | 2.0 | 2.4 | V | IF=20mA |
| I _R | Reverse Current | All | | 10 | uA | VR = 5V |

Absolute Maximum Ratings at T_A=25°C

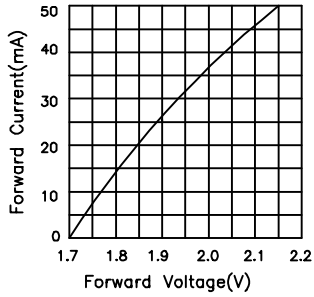
| Parameter | Super Bright Yellow | Units |
|-------------------------------|---------------------|-------|
| Power dissipation | 125 | mW |
| DC Forward Current | 30 | mA |
| Peak Forward Current [1] | 150 | mA |
| Reverse Voltage | 5 | V |
| Operating/Storage Temperature | -40°C To +85°C | |

Note:

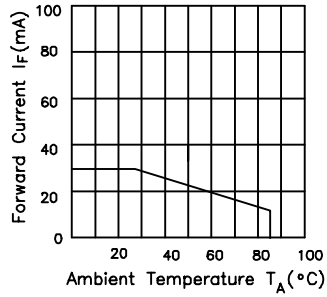
1. 1/10 Duty Cycle, 0.1ms Pulse Width.



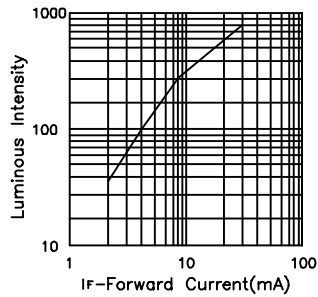
Super Bright Yellow KP-2012SYC, KP-2012SYCK



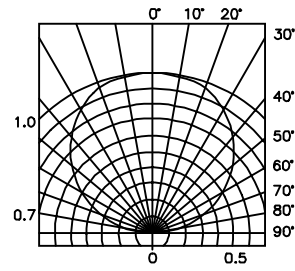
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE

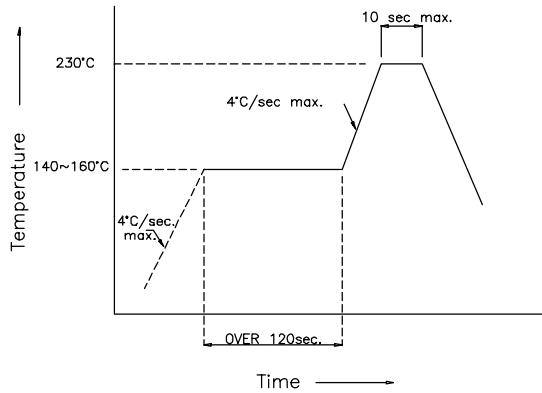


LUMINOUS INTENSITY Vs. FORWARD CURRENT



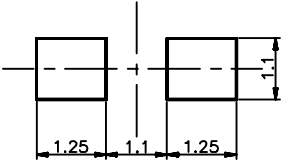
SPATIAL DISTRIBUTION

KP-2012SY SERIES SMT Reflow Soldering Instructions



KP-2012SY SERIES Recommended Soldering Pattern (Units : mm)

FOR REFLOW SOLDERING



KP-2012SY SERIES Tape Specifications (Units : mm)

