

### Features

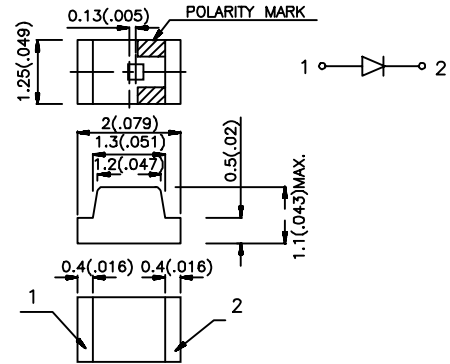
- 2.0mmx1.2mm SMT LED, 1.1mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.

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  $\pm 0.1$  (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.	
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 $T_A=25^\circ\text{C}$

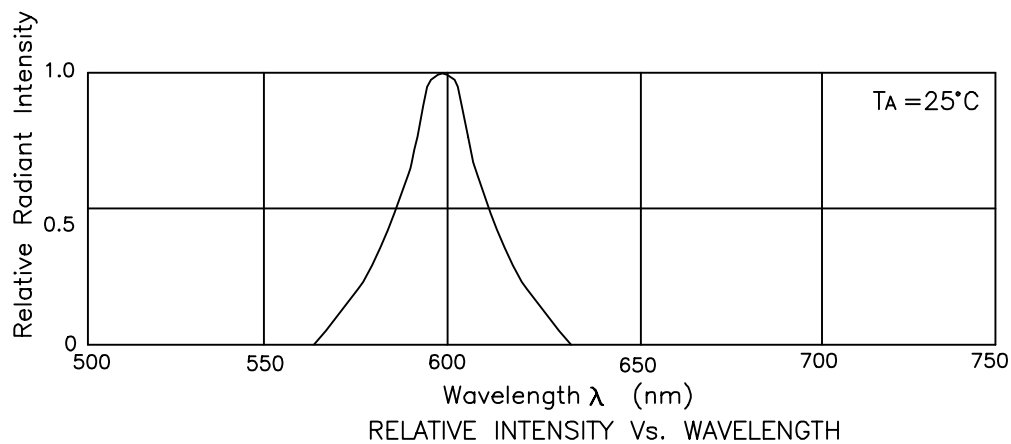
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
$\lambda_{\text{peak}}$	Peak Wavelength	Super Bright Yellow	590		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Halfwidth	Super Bright Yellow	20		nm	IF=20mA
C	Capacitance	Super Bright Yellow	33		pF	VF=0V;f=1MHz
$V_F$	Forward Voltage	Super Bright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

## Absolute Maximum Ratings at $T_A=25^\circ\text{C}$

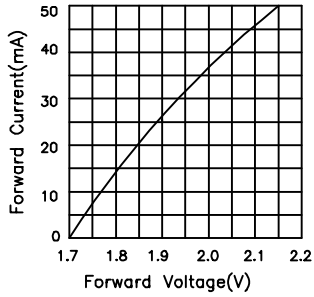
Parameter	Super Bright Yellow	Units
Power dissipation	125	mW
DC Forward Current	30	mA
Peak Forward Current [1]	150	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

Note:

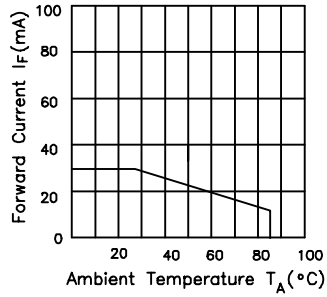
1. 1/10 Duty Cycle, 0.1ms Pulse Width.



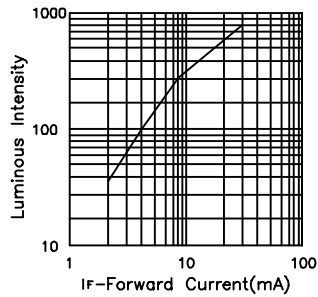
## Super Bright Yellow KP-2012SYC, KP-2012SYCK



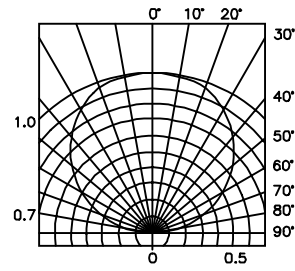
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE

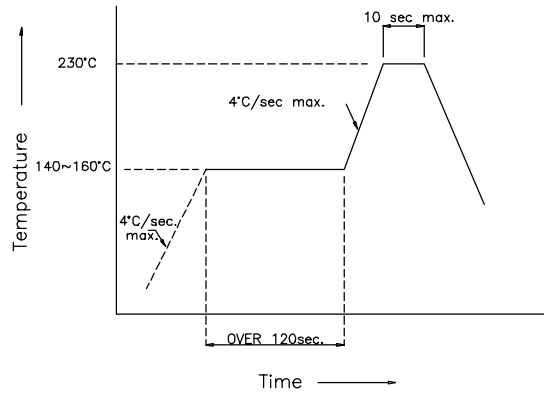


LUMINOUS INTENSITY Vs. FORWARD CURRENT



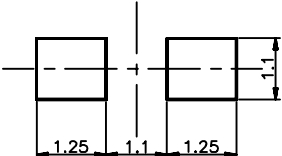
SPATIAL DISTRIBUTION

## 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)

