

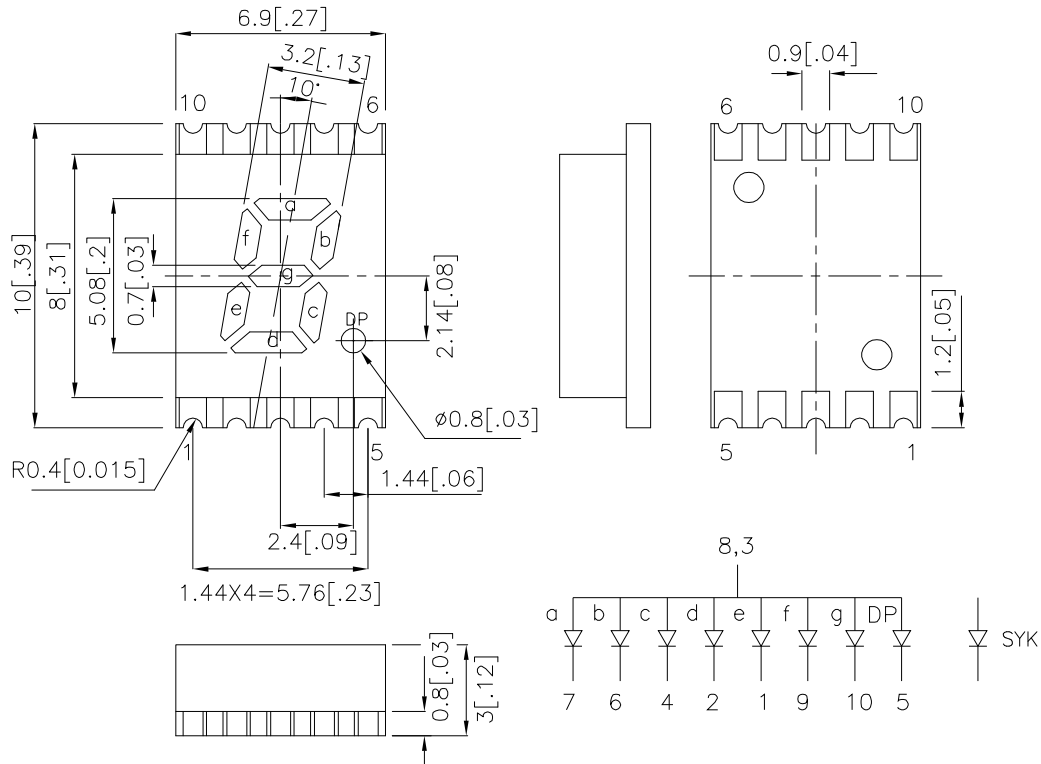
## Features

- 0.2INCH DIGIT HEIGHT.
- LOW CURRENT OPERATION.
- EXCELLENT CHARACTER APPEARANCE.
- I.C. COMPATIBLE
- MECHANICALLY RUGGED.
- GRAY FACE,WHITE SEGMENT.
- PACKAGE : 650PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 4.
- RoHS COMPLIANT.

### Description

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

### Package Dimensions & Internal Circuit Diagram



Notes:

1. All dimensions are in millimeters (inches), Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.
2. Specifications are subject to change without notice.
3. The gap between the reflector and PCB shall not exceed 0.25mm.

## Selection Guide

| Part No.   | Dice                          | Lens Type      | Iv (ucd) [1]<br>@ 10mA |       | Description                     |
|------------|-------------------------------|----------------|------------------------|-------|---------------------------------|
|            |                               |                | Min.                   | Typ.  |                                 |
| KCSA02-107 | SUPER BRIGHT YELLOW (InGaAlP) | WHITE DIFFUSED | 8000                   | 34000 | Common Anode, Rt. Hand Decimal. |

Note:  
1. Luminous Intensity / Luminous Flux: +/-15%.

## Electrical / Optical Characteristics at TA=25°C

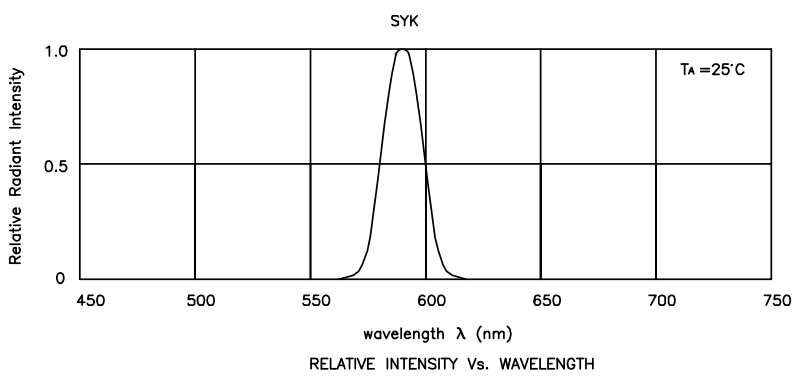
| Symbol                | Parameter                | Device              | Typ. | Max. | Units | Test Conditions |
|-----------------------|--------------------------|---------------------|------|------|-------|-----------------|
| $\lambda_{peak}$      | Peak Wavelength          | Super Bright Yellow | 590  |      | nm    | IF=20mA         |
| $\lambda_D$ [1]       | Dominant Wavelength      | Super Bright Yellow | 590  |      | nm    | IF=20mA         |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | Super Bright Yellow | 20   |      | nm    | IF=20mA         |
| C                     | Capacitance              | Super Bright Yellow | 20   |      | pF    | VF=0V;f=1MHz    |
| VF [2]                | Forward Voltage          | Super Bright Yellow | 2.0  | 2.5  | V     | IF=20mA         |
| IR                    | Reverse Current          | Super Bright Yellow |      | 10   | uA    | VR = 5V         |

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

## Absolute Maximum Ratings at TA=25°C

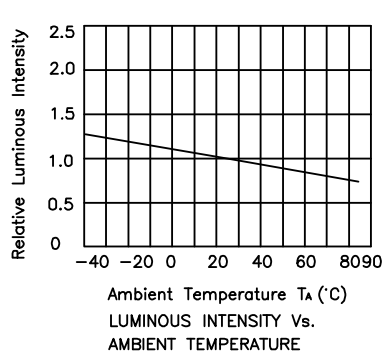
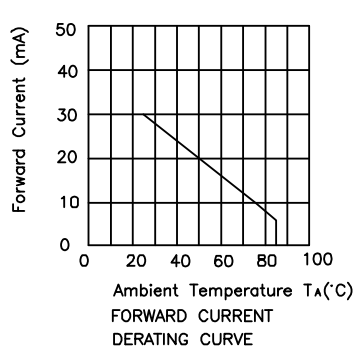
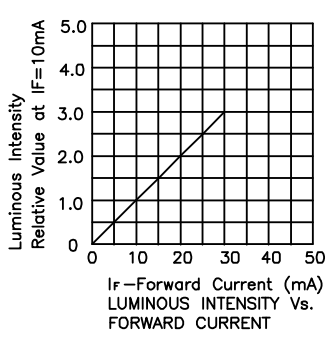
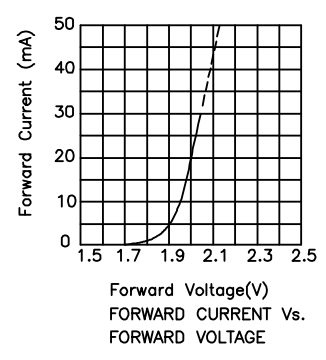
| Parameter                     | Super Bright Yellow | Units |
|-------------------------------|---------------------|-------|
| Power dissipation             | 75                  | mW    |
| DC Forward Current            | 30                  | mA    |
| Peak Forward Current [1]      | 175                 | mA    |
| Reverse Voltage               | 5                   | V     |
| Operating/Storage Temperature | -40°C To +85°C      |       |

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



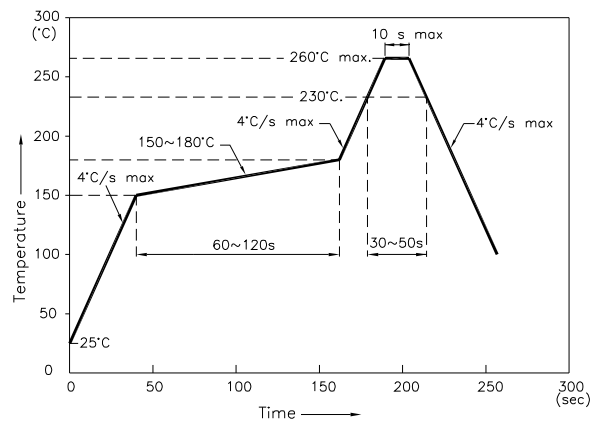
**Super Bright Yellow**

**KCSA02-107**



## KCSA02-107

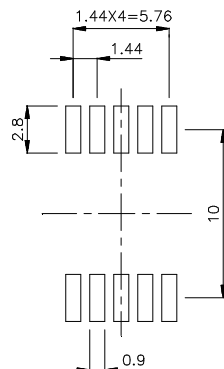
Reflow Soldering Profile For Lead-free SMT Process.



### 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)

