

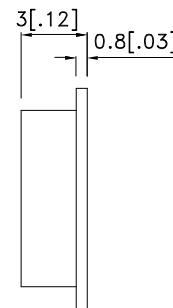
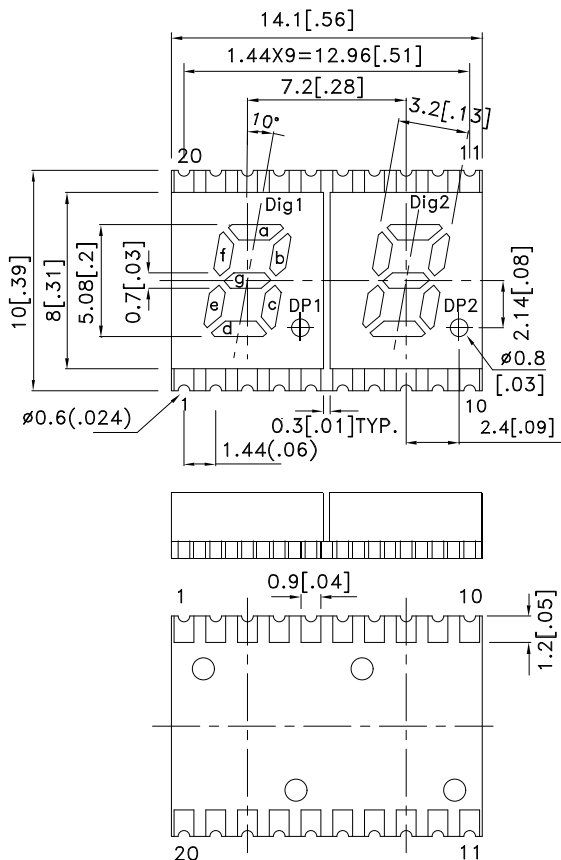
Features

- 0.2 INCH DIGIT HEIGHT.
- LOW CURRENT OPERATION.
- EXCELLENT CHARACTER APPEARANCE.
- I.C. COMPATIBLE.
- MECHANICALLY RUGGED.
- PACKAGE :300PCS / REEL.
- GRAY FACE, WHITE SEGMENT.
- MOISTURE SENSITIVITY LEVEL : LEVEL 4.
- RoHS COMPLIANT.

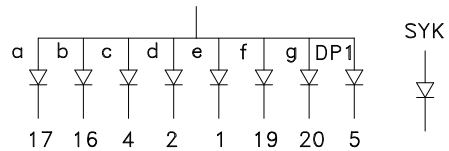
Description

The Super Bright Yellow device is made with InGaAlP (on GaAs substrate) light emitting diode chip.

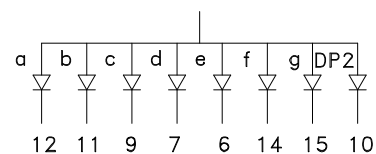
Package Dimensions & Internal Circuit Diagram



DIG.1: 3,18



DIG.2: 8,13



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] @ 10mA | | Description |
|------------|-------------------------------|----------------|------------------------|-------|---------------------------------|
| | | | Min. | Typ. | |
| KCDA02-107 | 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 |
|-----------------------|--------------------------|---------------------|------|------|-------|---------------------------|
| λ_{peak} | Peak Wavelength | Super Bright Yellow | 590 | | nm | I _F =20mA |
| λ_D [1] | Dominant Wavelength | Super Bright Yellow | 590 | | nm | I _F =20mA |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | Super Bright Yellow | 20 | | nm | I _F =20mA |
| C | Capacitance | Super Bright Yellow | 20 | | pF | V _F =0V;f=1MHz |
| V _F [2] | Forward Voltage | Super Bright Yellow | 2.0 | 2.5 | V | I _F =20mA |
| I _R | Reverse Current | Super Bright Yellow | | 10 | uA | V _R =5V |

Notes:

1. Wavelength: +/-1nm.

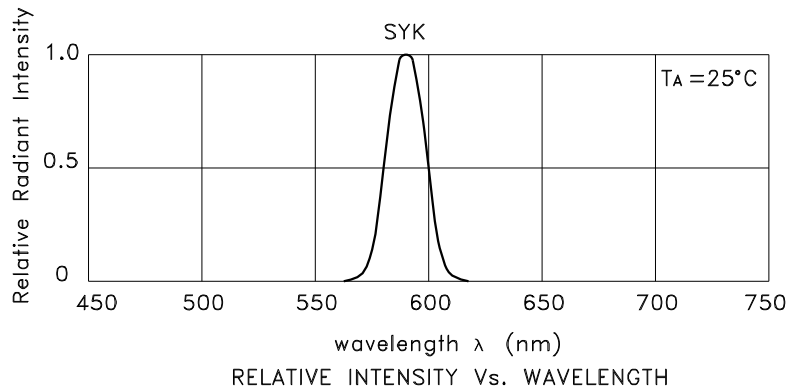
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

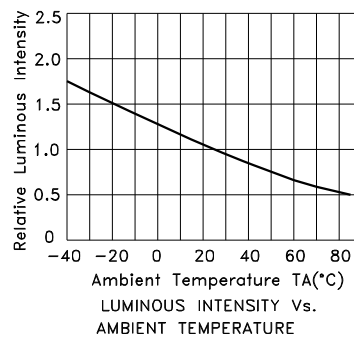
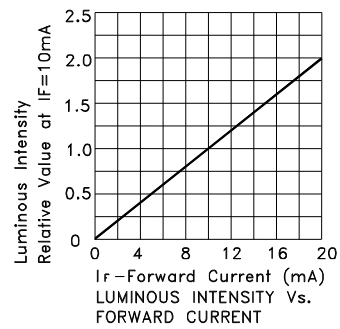
| Parameter | Super Bright Yellow | Units |
|---------------------------------|---------------------|-------|
| Power dissipation | 75 | mW |
| DC Forward Current | 30 | mA |
| Peak Forward Current [1] | 175 | mA |
| Reverse Voltage | 5 | V |
| Operating / Storage Temperature | -40°C To +85°C | |

Note:

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

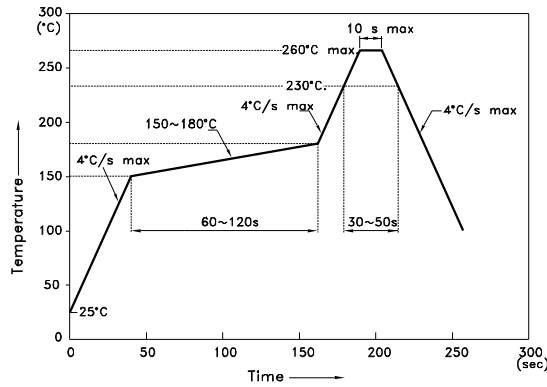


Super Bright Yellow KCDA02-107



KCDA02-107

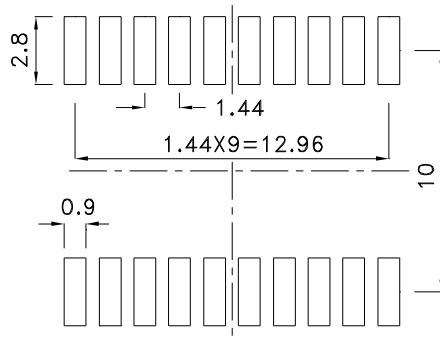
Reflow Soldering Profile For Lead-free SMT Process.



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; Tolerance: ± 0.15)



Tape Specifications (Units : mm)

