

APA3010YD

YELLOW

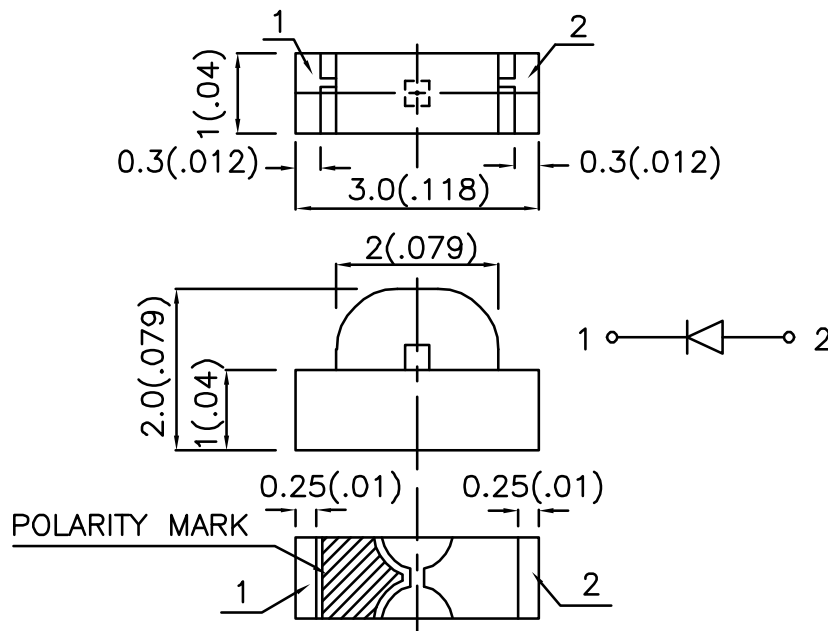
### Features

- 3.0mmx1.0mm RIGHT ANGLE SMT LED, 2.0mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACK LIGHT AND INDICATOR.
- PACKAGE : 2000PCS / REEL.
- RoHS COMPLIANT.

### Description

The Yellow source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Yellow Light Emitting Diode.

### Package Dimensions



#### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.15$  (0.006") unless otherwise noted.
3. Specifications are subject to change without notice.

## Selection Guide

| Part No.  | Dice               | Lens Type       | Iv (mcd)<br>@ 20mA |      | Viewing<br>Angle |
|-----------|--------------------|-----------------|--------------------|------|------------------|
|           |                    |                 | Min.               | Typ. | θ1/2             |
| APA3010YD | YELLOW (GaAsP/GaP) | YELLOW DIFFUSED | 2.6                | 8    | 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 TA=25°C

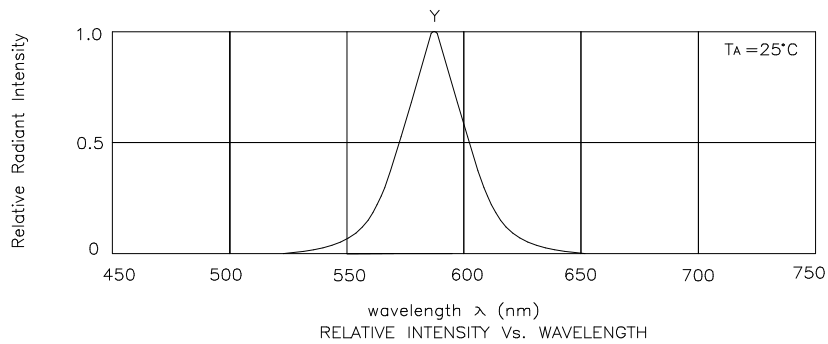
| Symbol | Parameter                | Device | Typ. | Max. | Units | Test Conditions |
|--------|--------------------------|--------|------|------|-------|-----------------|
| λpeak  | Peak Wavelength          | Yellow | 590  |      | nm    | IF=20mA         |
| λD     | Dominant Wavelength      | Yellow | 588  |      | nm    | IF=20mA         |
| Δλ1/2  | Spectral Line Half-width | Yellow | 35   |      | nm    | IF=20mA         |
| C      | Capacitance              | Yellow | 20   |      | pF    | VF=0V;f=1MHz    |
| VF     | Forward Voltage          | Yellow | 2.1  | 2.5  | V     | IF=20mA         |
| IR     | Reverse Current          | Yellow |      | 10   | uA    | VR= 5V          |

## Absolute Maximum Ratings at TA=25°C

| Parameter                       | Yellow         | Units |
|---------------------------------|----------------|-------|
| Power dissipation               | 105            | mW    |
| DC Forward Current              | 30             | mA    |
| Peak Forward Current [1]        | 140            | mA    |
| Reverse Voltage                 | 5              | V     |
| Operating / Storage Temperature | -40°C To +85°C |       |

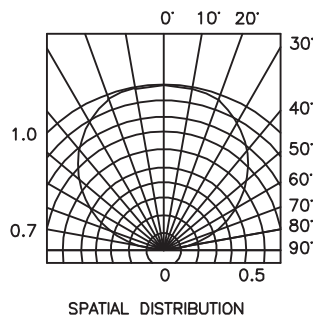
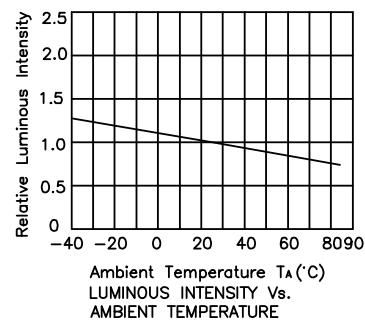
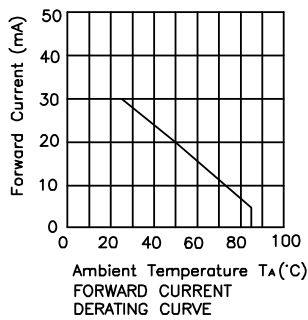
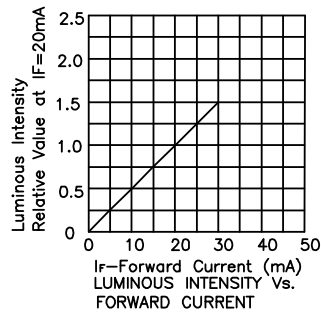
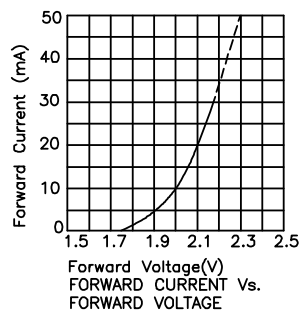
Note:

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



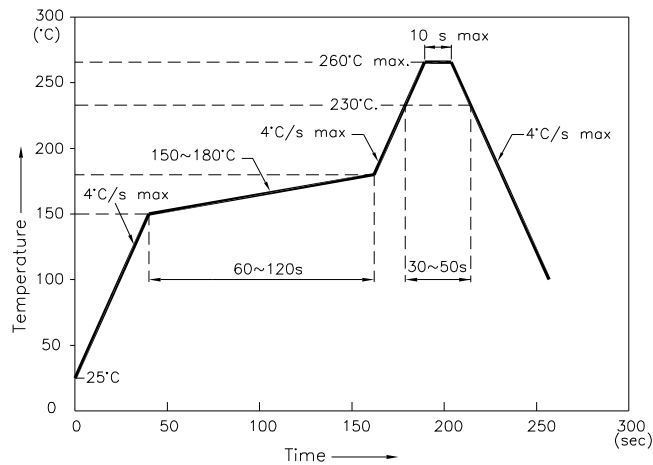
Yellow

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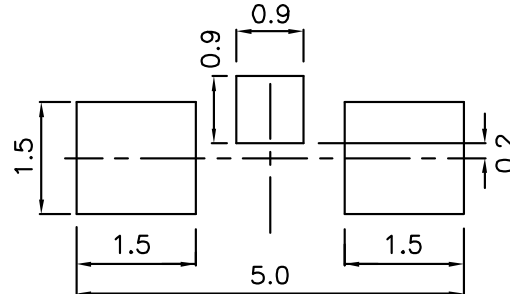
Reflow Soldering Profile For Lead-free SMT Process.



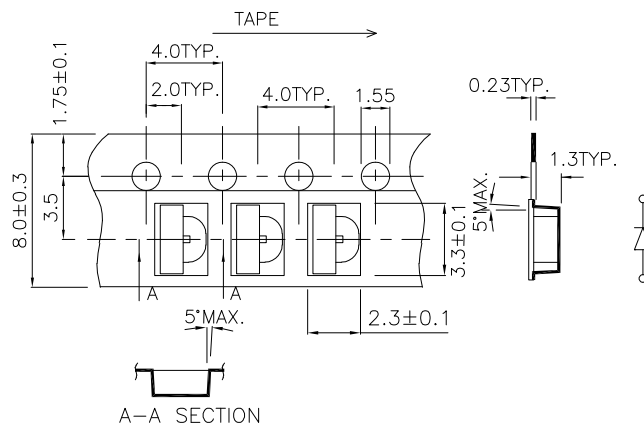
### NOTES:

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)

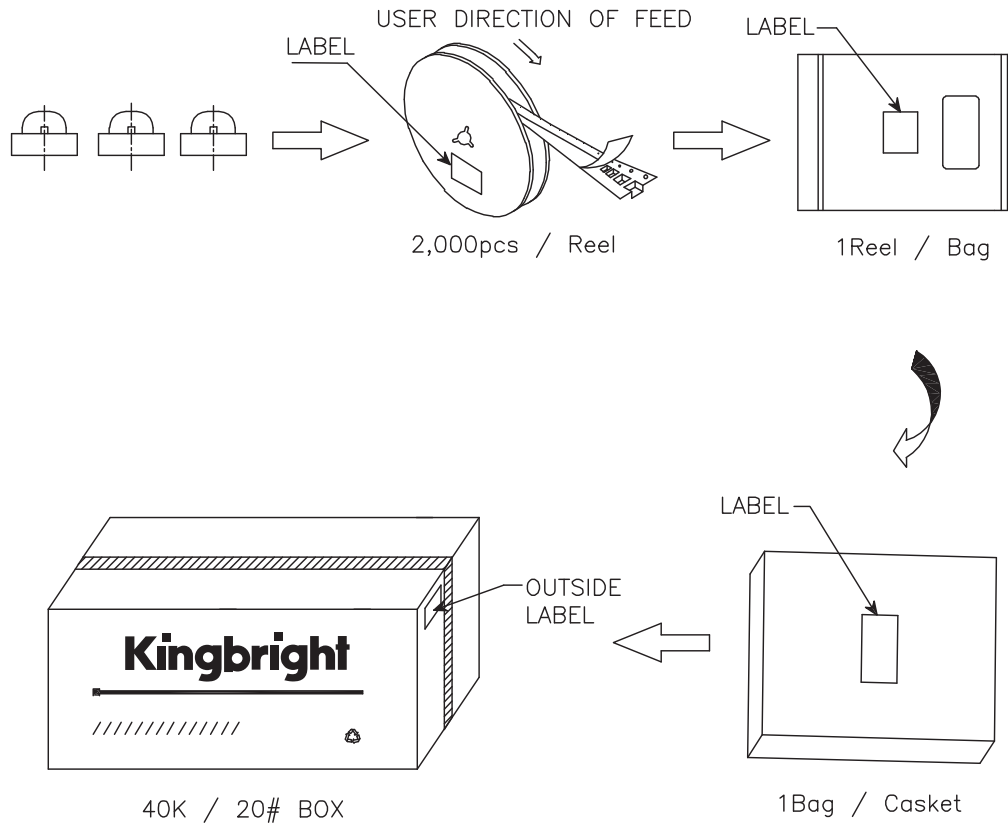


## Tape Specifications (Units : mm)



## PACKING & LABEL SPECIFICATIONS

APA3010YD



|                                                                                      |                                                                                                                     |
|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| <b>Kingbright</b>                                                                    |                                                                                                                     |
| P/NO: APA3010xxx                                                                     |                                                                                                                     |
| QTY: 2,000 pcs                                                                       | Q.C. <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">Q C<br/>xx xx. xxxx<br/>PASSED</span> |
| S/N: XXXX                                                                            | Date                                                                                                                |
| CODE: XXX                                                                            |                                                                                                                     |
| LOT NO:                                                                              |                                                                                                                     |
|  |                                                                                                                     |
| RoHS Compliant                                                                       |                                                                                                                     |

### Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength:  $\pm 1\text{nm}$
2. Luminous Intensity:  $\pm 15\%$
3. Forward Voltage:  $\pm 0.1\text{V}$

Note: Accuracy may depend on the sorting parameters.