

Part Number: APTR3216YC

Yellow

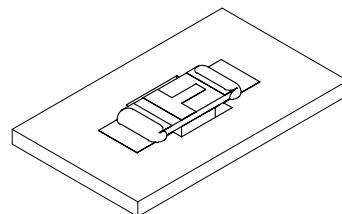
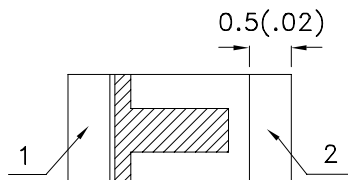
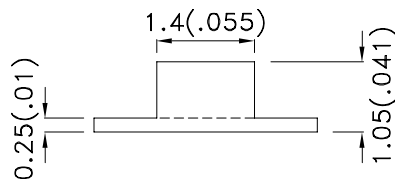
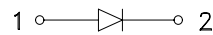
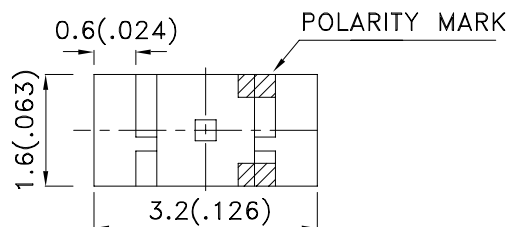
### Features

- 3.2mmx1.6mm SMT LED, 1.05mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- 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  $\pm 0.2$  (0.008") unless otherwise noted.
3. Specifications are subject to change without notice.
4. The device has a single mounting surface. The device must be mounted according to the specifications.



## Selection Guide

| Part No.   | Dice               | Lens Type   | Iv (mcd) [2]<br>@ 20mA |      | Viewing<br>Angle [1] |
|------------|--------------------|-------------|------------------------|------|----------------------|
|            |                    |             | Min.                   | Typ. | 2θ1/2                |
| APTR3216YC | Yellow (GaAsP/GaP) | WATER CLEAR | 2.6                    | 8    | 120°                 |

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. Luminous intensity/ luminous Flux: +/-15%.

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

| Symbol | Parameter                | Device | Typ. | Max. | Units | Test Conditions |
|--------|--------------------------|--------|------|------|-------|-----------------|
| λpeak  | Peak Wavelength          | Yellow | 590  |      | nm    | IF=20mA         |
| λD [1] | 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 [2] | Forward Voltage          | Yellow | 2.1  | 2.5  | V     | IF=20mA         |
| IR     | Reverse Current          | Yellow |      | 10   | uA    | VR=5V           |

Notes:

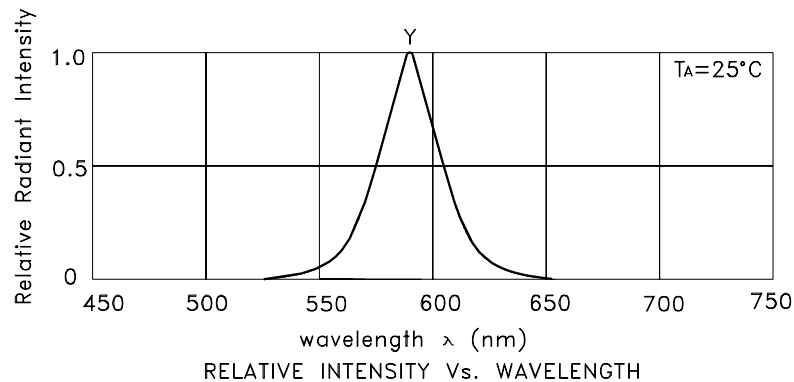
- 1.Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

## Absolute Maximum Ratings at TA=25°C

| Parameter                | Yellow         | Units |
|--------------------------|----------------|-------|
| Power dissipation        | 75             | mW    |
| DC Forward Current       | 30             | mA    |
| Peak Forward Current [1] | 140            | mA    |
| Reverse Voltage          | 5              | V     |
| Operating Temperature    | -40°C To +85°C |       |
| Storage Temperature      | -40°C To +85°C |       |

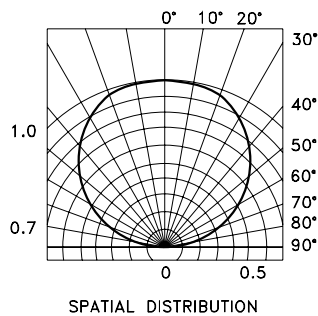
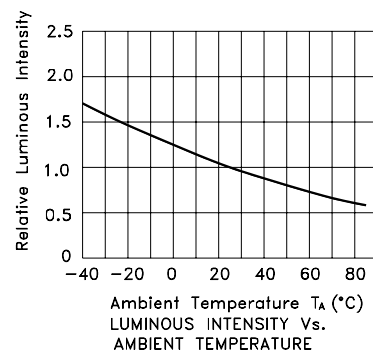
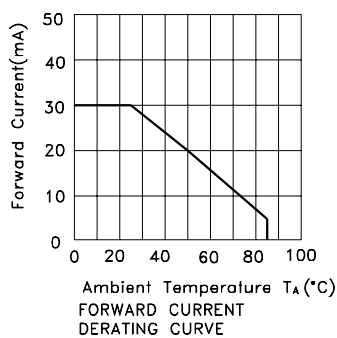
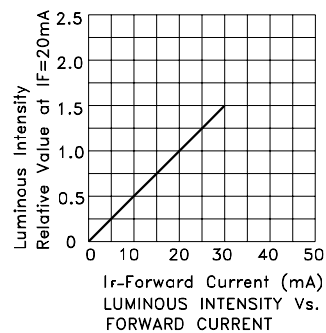
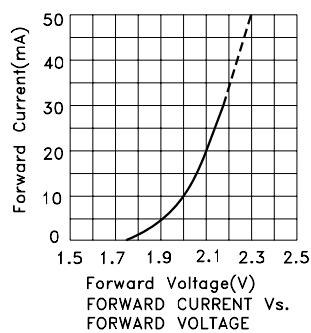
Note:

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



Yellow

APTR3216YC



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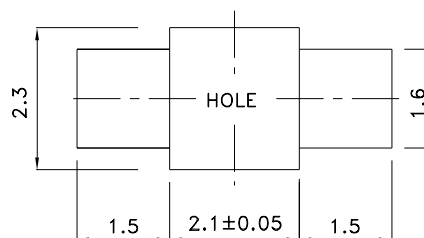
### Reflow Soldering Profile For Lead-free SMT Process.



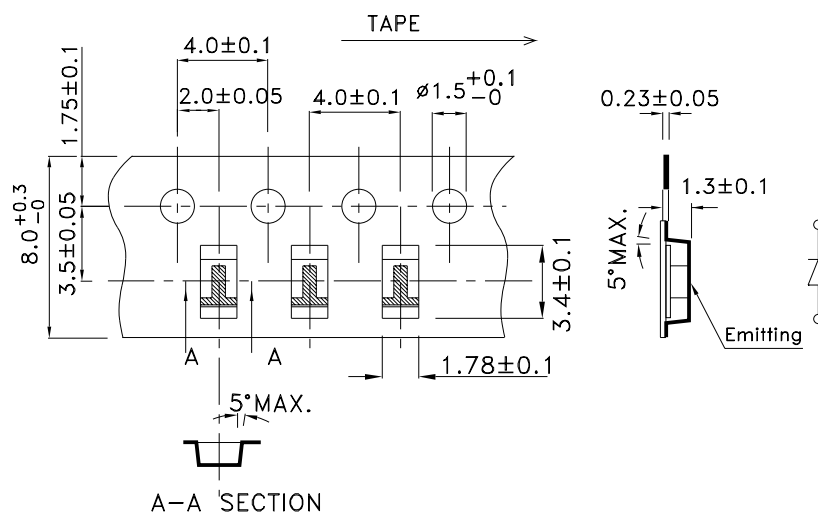
#### NOTES:

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; Tolerance: $\pm 0.1$ )

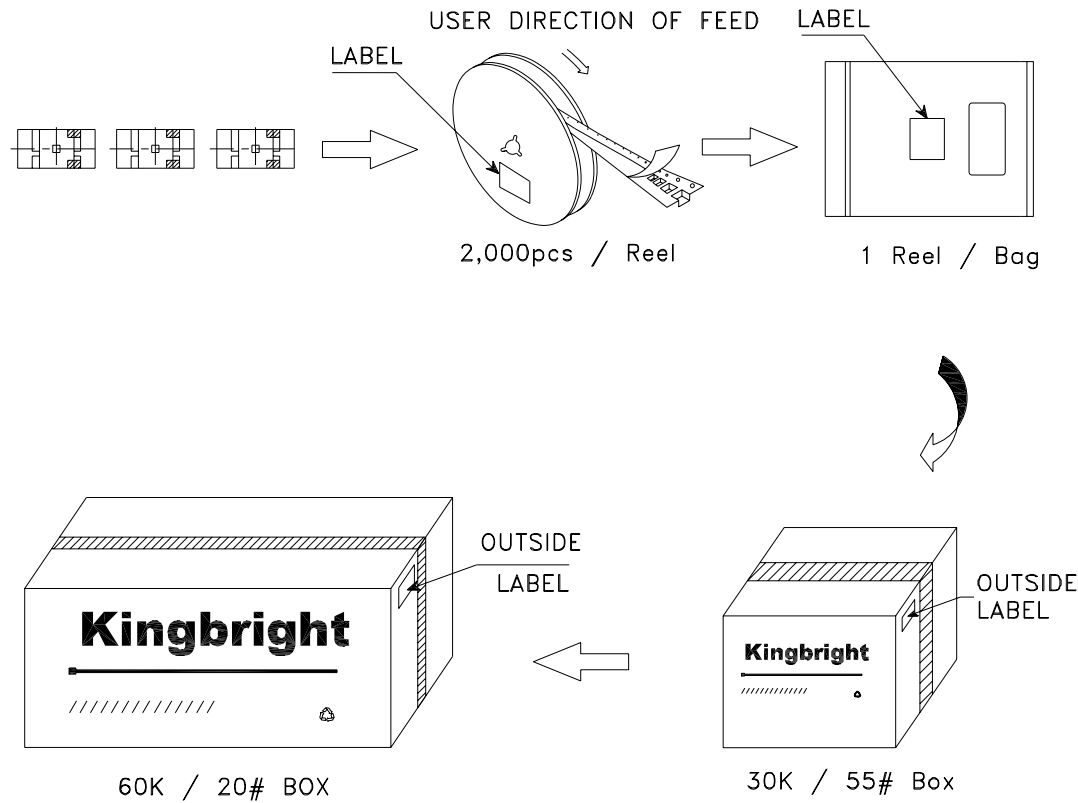


### Tape Specifications (Units : mm)



PACKING & LABEL SPECIFICATIONS

APTR3216YC



|                                                                                      |                                               |
|--------------------------------------------------------------------------------------|-----------------------------------------------|
| <b>Kingbright</b>                                                                    |                                               |
| P/NO: APTR3216xxx                                                                    |                                               |
| QTY: 2,000 pcs                                                                       | Q.C. <div>Q C<br/>xx xx xxxx<br/>PASSED</div> |
| S/N: XXXX                                                                            |                                               |
| CODE: XXX                                                                            |                                               |
| LOT NO:                                                                              |                                               |
|  |                                               |
| xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx                                                     |                                               |
| MADE IN CHINA                                                                        | RoHS Compliant                                |