

P/N: KPC-3216SEC

SUPER BRIGHT ORANGE

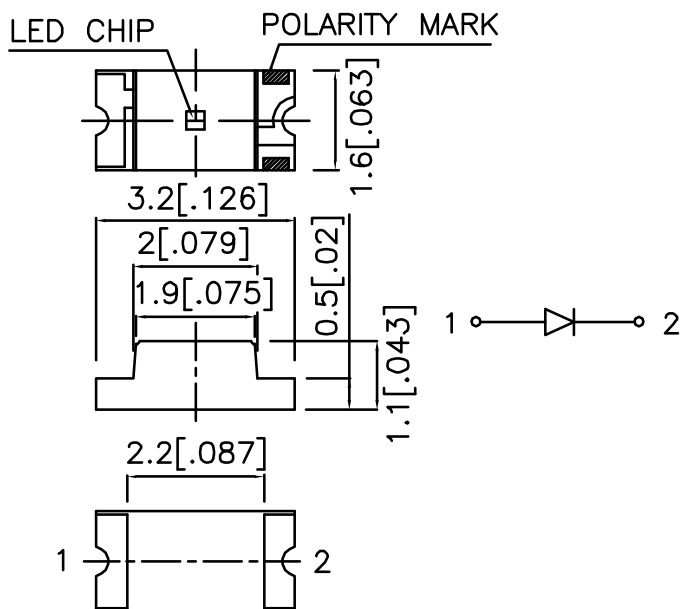
### Features

- 3.2X1.6mm SMT LED, 1.1mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE: 2000PCS / REEL .
- RoHS COMPLIANT.

### Description

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

### 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.

## Selection Guide

| Part No.    | Dice                          | Lens Type   | Iv (mcd)<br>@ 20mA |      | Viewing<br>Angle |
|-------------|-------------------------------|-------------|--------------------|------|------------------|
|             |                               |             | Min.               | Typ. | 2 $\theta$ 1/2   |
| KPC-3216SEC | SUPER BRIGHT ORANGE (InGaAlP) | WATER CLEAR | 70                 | 200  | 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<sub>A</sub>=25°C

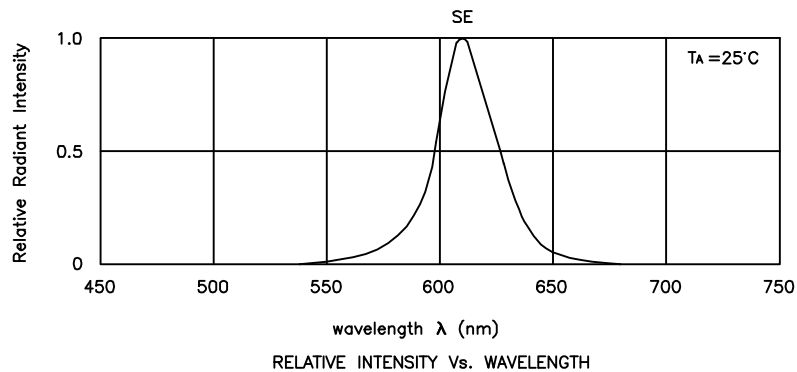
| Symbol                | Parameter                | Device              | Typ. | Max. | Units | Test Conditions            |
|-----------------------|--------------------------|---------------------|------|------|-------|----------------------------|
| $\lambda_{peak}$      | Peak Wavelength          | Super Bright Orange | 610  |      | nm    | I <sub>F</sub> =20mA       |
| $\lambda_D$           | Dominant Wavelength      | Super Bright Orange | 601  |      | nm    | I <sub>F</sub> =20mA       |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | Super Bright Orange | 29   |      | nm    | I <sub>F</sub> =20mA       |
| C                     | Capacitance              | Super Bright Orange | 30   |      | pF    | V <sub>F</sub> =0V; f=1MHz |
| V <sub>F</sub>        | Forward Voltage          | Super Bright Orange | 2.0  | 2.5  | V     | I <sub>F</sub> =20mA       |
| I <sub>R</sub>        | Reverse Current          | Super Bright Orange |      | 10   | uA    | V <sub>R</sub> = 5V        |

## Absolute Maximum Ratings at T<sub>A</sub>=25°C

| Parameter                       | Super Bright Orange | Units |
|---------------------------------|---------------------|-------|
| Power dissipation               | 75                  | mW    |
| DC Forward Current              | 30                  | mA    |
| Peak Forward Current [1]        | 195                 | mA    |
| Reverse Voltage                 | 5                   | V     |
| Operating / Storage Temperature | -40°C To +85°C      |       |

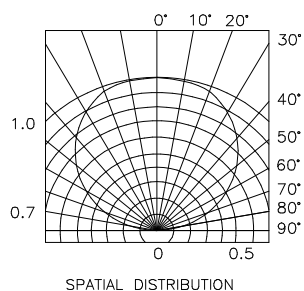
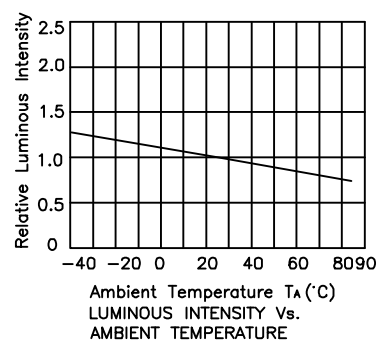
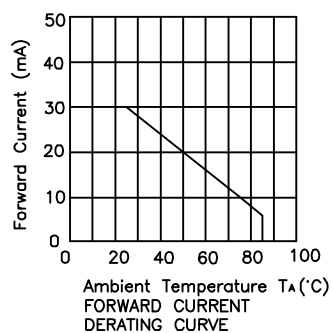
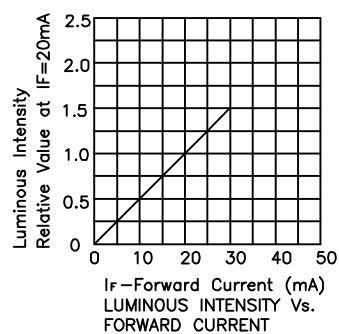
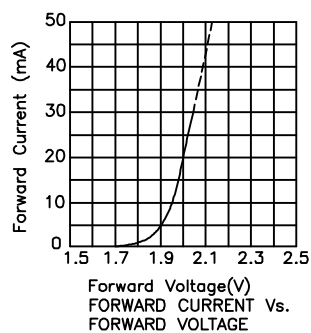
Note:

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



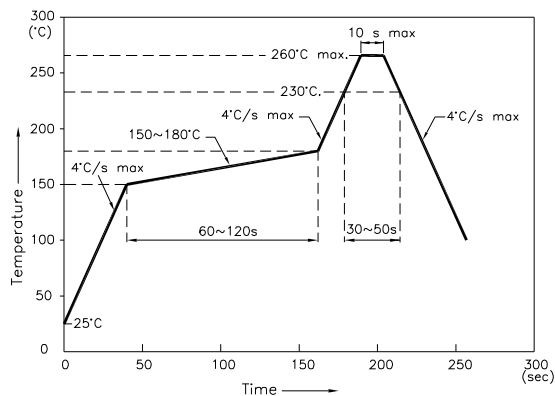
## Super Bright Orange

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## KPC-3216SEC

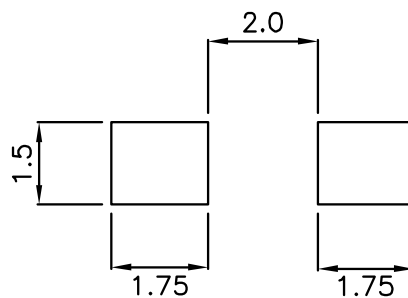
Reflow Soldering Profile For Lead-free SMT Process.



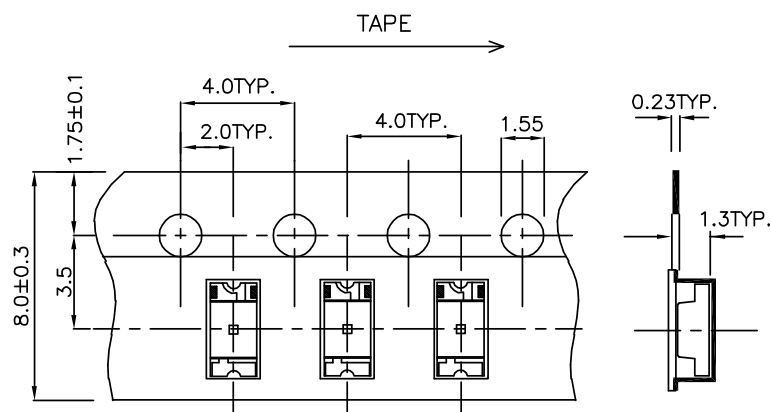
### NOTES:

1. We recommend the reflow temperature  $245^{\circ}\text{C} (+/-5^{\circ}\text{C})$ . The maximum soldering temperature should be limited to  $260^{\circ}\text{C}$ .
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)



### Remarks:

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

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

Note: Accuracy may depend on the sorting parameters.