

Part Number: KPTR-3216SECK

Super Bright Orange

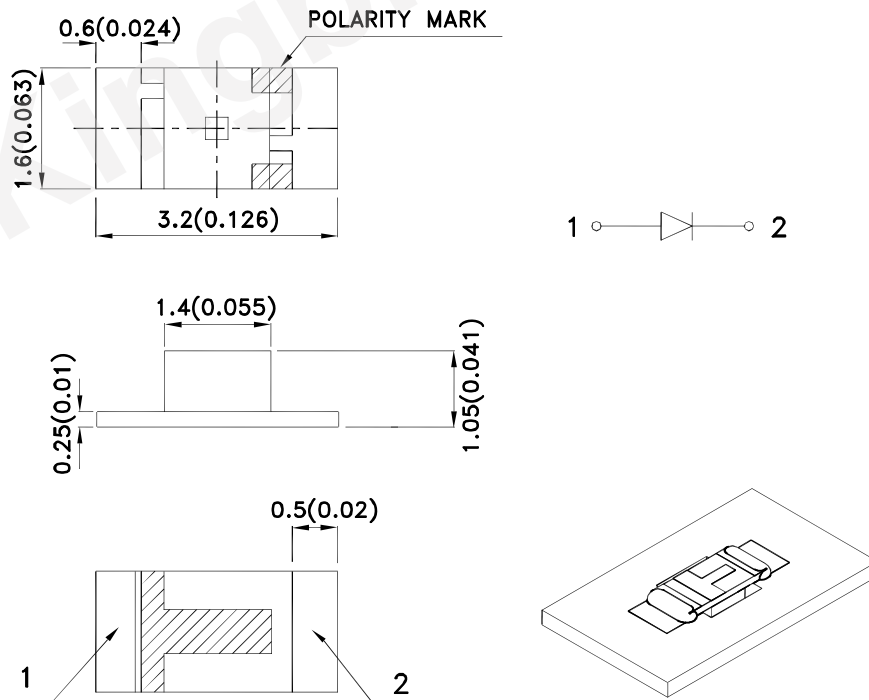
### Features

- 3.2mmx1.6mm SMD LED, 1.05mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Package : 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

### Description

The Super Bright Orange device is made with AlGaInP (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. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
4. The device has a single mounting surface. The device must be mounted according to the specifications.



## Selection Guide

| Part No.      | Emitting Color (Material)     | Lens Type   | Iv (mcd) [2]<br>@ 20mA |      | Viewing<br>Angle [1] |
|---------------|-------------------------------|-------------|------------------------|------|----------------------|
|               |                               |             | Min.                   | Typ. | 2θ1/2                |
| KPTR-3216SECK | Super Bright Orange (AlGaInP) | Water Clear | 120                    | 250  | 140°                 |
|               |                               |             | *80                    | *180 |                      |

### Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
2. Luminous intensity/ luminous Flux: +/-15%.
- \*Luminous intensity value is traceable to CIE127-2007 standards.

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

| Symbol | Parameter                | Emitting Color      | Typ. | Max. | Units | Test Conditions |
|--------|--------------------------|---------------------|------|------|-------|-----------------|
| λpeak  | Peak Wavelength          | Super Bright Orange | 610  |      | nm    | IF=20mA         |
| λD [1] | Dominant Wavelength      | Super Bright Orange | 601  |      | nm    | IF=20mA         |
| Δλ1/2  | Spectral Line Half-width | Super Bright Orange | 29   |      | nm    | IF=20mA         |
| C      | Capacitance              | Super Bright Orange | 15   |      | pF    | VF=0V;f=1MHz    |
| VF [2] | Forward Voltage          | Super Bright Orange | 2.1  | 2.5  | V     | IF=20mA         |
| IR     | Reverse Current          | Super Bright Orange |      | 10   | uA    | VR=5V           |

### Notes:

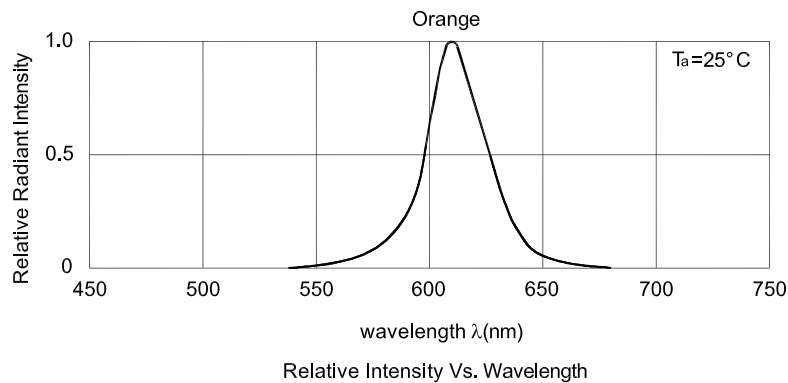
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.
3. Wavelength value is traceable to CIE127-2007 standards.
4. Excess driving current and/or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

## Absolute Maximum Ratings at TA=25°C

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

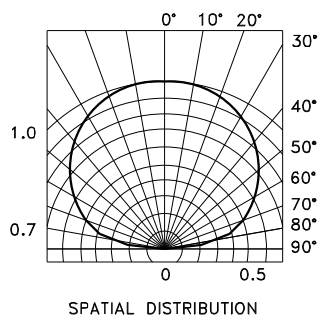
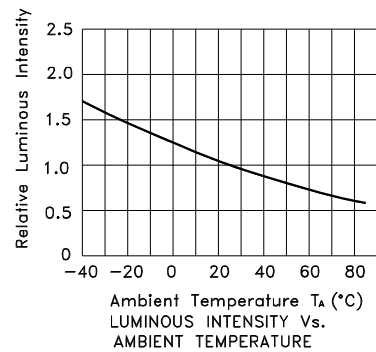
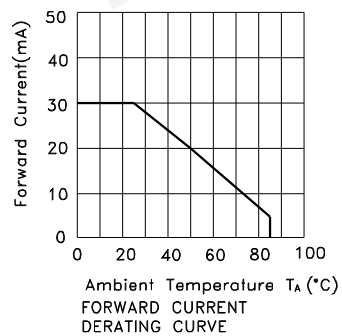
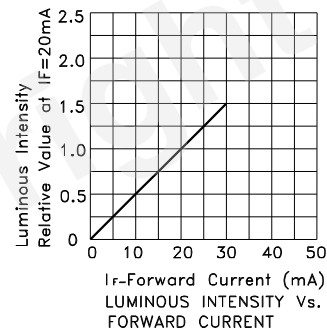
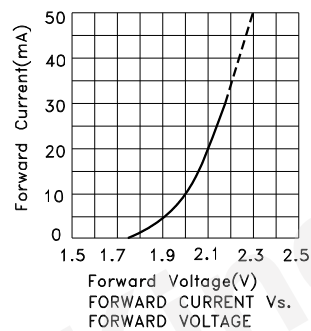
### Notes:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. Relative humidity levels maintained between 40% and 60% in production area are recommended to avoid the build-up of static electricity – Ref JEDEC/JESD625-A and JEDEC/J-STD-033.



Super Bright Orange

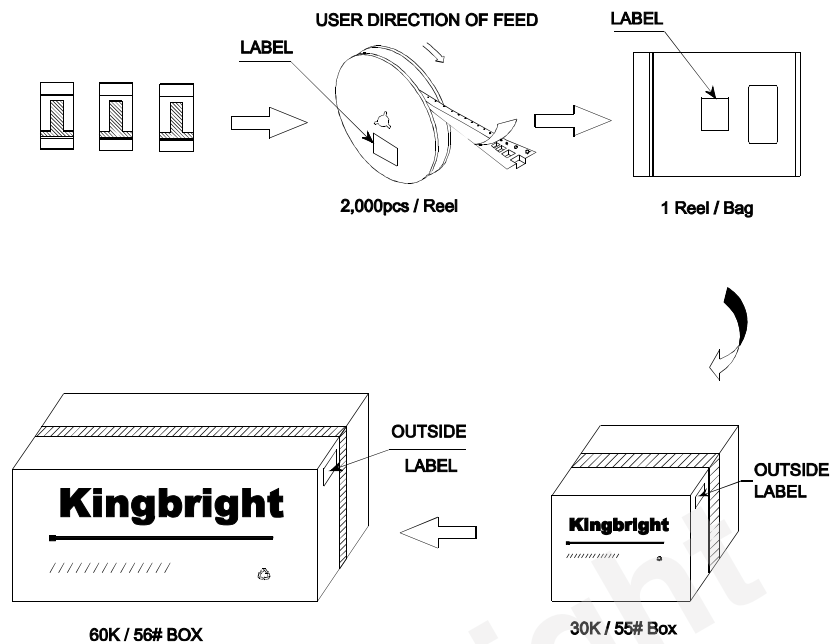
KPTR-3216SECK





## PACKING & LABEL SPECIFICATIONS

## KPTR-3216SECK



|  |      |                  |
|--|------|------------------|
| <b>Kingbright</b>                        |      |                  |
| P/NO: KPTR-3216xxx                       |      |                  |
| QTY: 2,000 pcs                           | Q.C. | QC               |
| S/N: XXXX                                |      | XXXXXX<br>PASSED |
| CODE: XXX                                |      |                  |
| LOT NO:                                  |      |                  |
|  |      |                  |
| xx |      |                  |
| RoHS Compliant                           |      |                  |

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