

#### 3.0X2.0mm SMD CHIP LED LAMP

APK3020SEC SUPER BRIGHT ORANGE

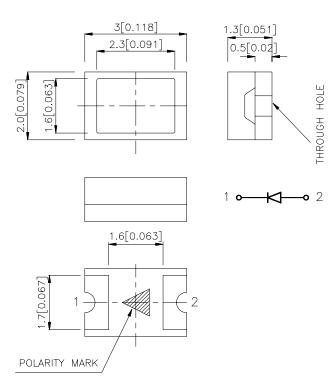
#### **Features**

- •3.0mmX2.0mmSMTLED, 1.3mmTHICKNESS.
- •LOW POWER CONSUMPTION.
- •WIDE VIEWING ANGLE.
- •IDEAL FOR BACKLIGHT AND INDICATOR.
- •VARIOUS COLORS AND LENS TYPES AVAILABLE.
- ●PACKAGE:2000PCS/REEL

#### **Description**

The Super Bright Orange source color devices are made with DH InGaAIP on GaAs substrate Light Emitting Diode.

### **Package Dimensions**



#### Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.2 (0.0079\mbox{"})$  unless otherwise noted.
- 3. Lead spacing is measured where the lead emerge package.
- 4. Specifications are subject to change without notice.

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## Selection Guide

| Part No.   | Dice                          | Lens Type   | <b>lv (mcd)</b><br>@ 20 mA |      | <b>Viewing</b><br>Angle |
|------------|-------------------------------|-------------|----------------------------|------|-------------------------|
|            |                               |             | Min.                       | Тур. | 201/2                   |
| APK3020SEC | SUPER BRIGHT ORANGE (InGaAIP) | WATER CLEAR | 100                        | 300  | 120°                    |

#### Note:

## Electrical / Optical Characteristics at T<sub>A</sub>=25°C

| Symbol         | Parameter               | Device              | Тур. | Max. | Units | Test Conditions |
|----------------|-------------------------|---------------------|------|------|-------|-----------------|
| λpeak          | Peak Wavelength         | Super Bright Orange | 610  |      | nm    | IF=20mA         |
| λD             | Dominate Wavelength     | Super Bright Orange | 601  |      | nm    | IF=20mA         |
| Δλ1/2          | Spectral Line Halfwidth | Super Bright Orange | 29   |      | nm    | IF=20mA         |
| С              | Capacitance             | Super Bright Orange | 30   |      | pF    | VF=0V;f=1MHz    |
| V <sub>F</sub> | Forward Voltage         | Super Bright Orange | 2.0  | 2.5  | V     | IF=20mA         |
| I <sub>R</sub> | Reverse Current         | Super Bright Orange |      | 10   | uA    | VR = 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      |       |

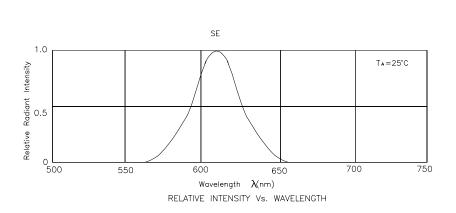
#### Note:

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

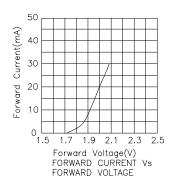
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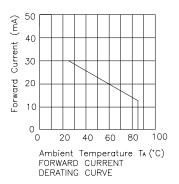
<sup>1.</sup>  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

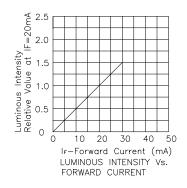


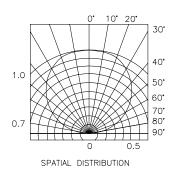


## Super Bright Orange APK3020SEC









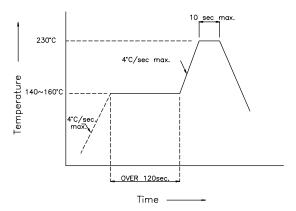
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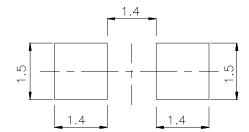
# Kingbright

## APK3020SEC SMT Reflow Soldering Instructions

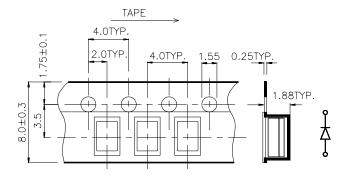
Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and second soldering process.



## Recommended Soldering Pattern (Units:mm)



## Tape Specifications (Units:mm)



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