

3.0mmx1.5mm SMD CHIP LED LAMP

Part Number: APL3015SECK-F01 Super Bright Orange

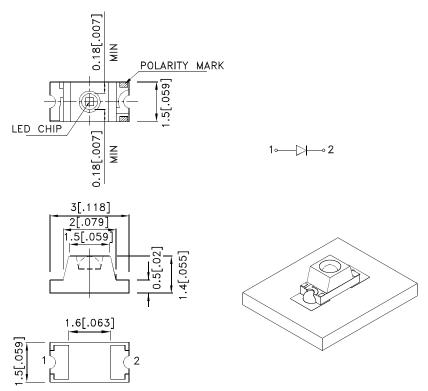
Features

- 3.0mmx1.5mm SMT LED, 1.4mm thickness.
- Low power consumption.
- Ideal for backlight and indicator.
- Various colors and lens types available.
- 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



- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ±0.2(0.008") unless otherwise noted.
- Specifications are subject to change without notice.
 The device has a single mounting surface. The device must be mounted according to the specifications.





SPEC NO: DSAF1075 APPROVED: WYNEC

REV NO: V.3 CHECKED: Allen Liu DATE: MAR/31/2009 DRAWN: S.M.Wu

PAGE: 1 OF 5 ERP: 1203001611

Selection Guide

| Part No. | Dice | Lens Type | lv (mcd) [2] @ 20mA | | Viewing Angle [1] |
|-----------------|-------------------------------|-------------|------------------------|------|----------------------|
| | | , | Min. | Тур. | 201/2 |
| APL3015SECK-F01 | Super Bright Orange (AlGaInP) | WATER CLEAR | 280 | 550 | 70° |

1. 01/2 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 | Тур. | 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 |
| С | Capacitance | Super Bright Orange | 15 | | pF | VF=0V;f=1MHz |
| VF [2] | Forward Voltage | Super Bright Orange | 2.1 | 2.5 | V | IF=20mA |
| lR | Reverse Current | Super Bright Orange | | 10 | uA | VR=5V |

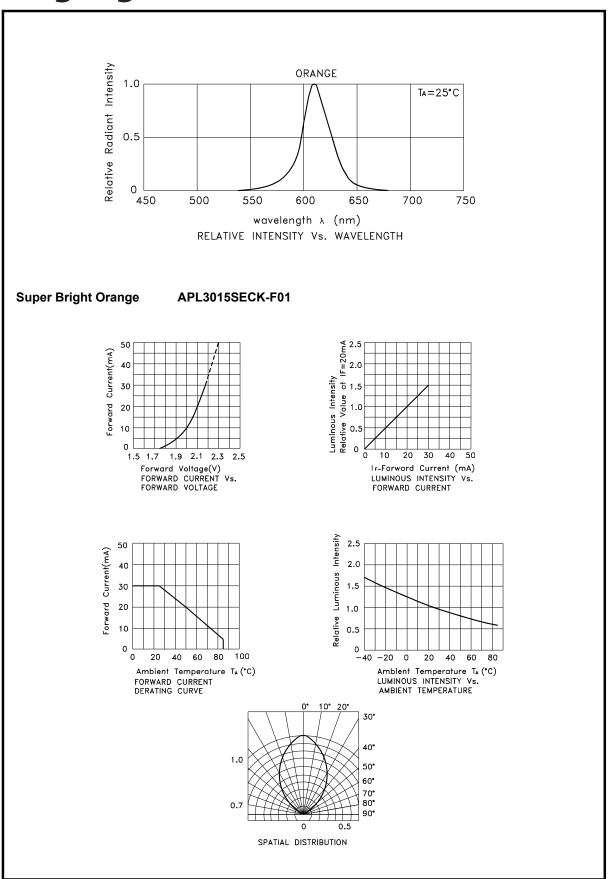
Absolute Maximum Ratings at TA=25°C

| 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 Temperature | -40°C To +85°C | | |
| Storage Temperature | -40°C To +85°C | | |

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

SPEC NO: DSAF1075 **REV NO: V.3** DATE: MAR/31/2009 PAGE: 2 OF 5 APPROVED: WYNEC CHECKED: Allen Liu DRAWN: S.M.Wu ERP: 1203001611

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



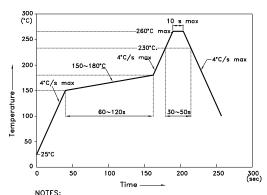
 SPEC NO: DSAF1075
 REV NO: V.3
 DATE: MAR/31/2009
 PAGE: 3 OF 5

 APPROVED: WYNEC
 CHECKED: Allen Liu
 DRAWN: S.M.Wu
 ERP: 1203001611

APL3015SECK-F01

Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.



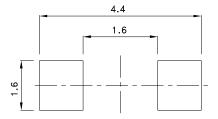
NOTES:

1.We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.

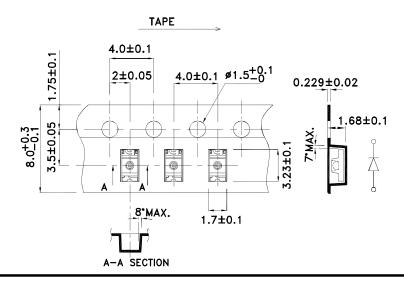
2.Don't cause stress to the epoxy resin while it is exposed to high temperature.

3.Number of reflow process shall be 2 times or less.

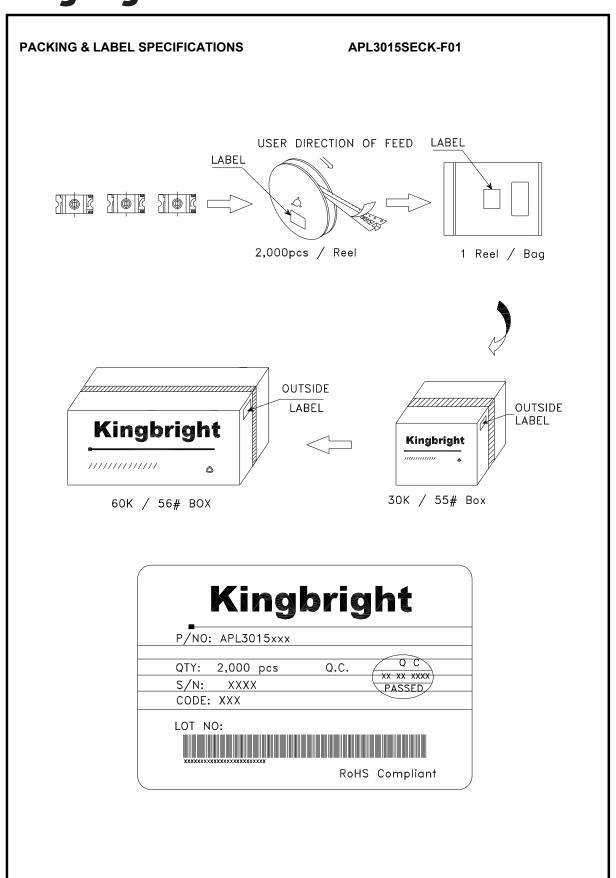
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



Tape Dimensions (Units: mm)



SPEC NO: DSAF1075 APPROVED: WYNEC REV NO: V.3 CHECKED: Allen Liu DATE: MAR/31/2009 DRAWN: S.M.Wu PAGE: 4 OF 5 ERP: 1203001611



SPEC NO: DSAF1075 APPROVED: WYNEC REV NO: V.3 CHECKED: Allen Liu DATE: MAR/31/2009 DRAWN: S.M.Wu PAGE: 5 OF 5 ERP: 1203001611