

Part Number: APBA3010SEKCGKC-GX

Super Bright Orange
Green

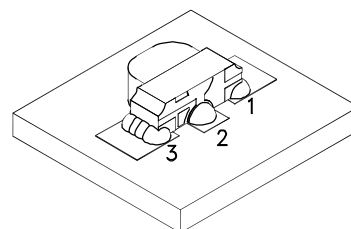
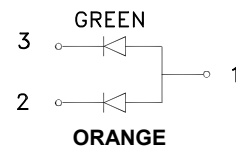
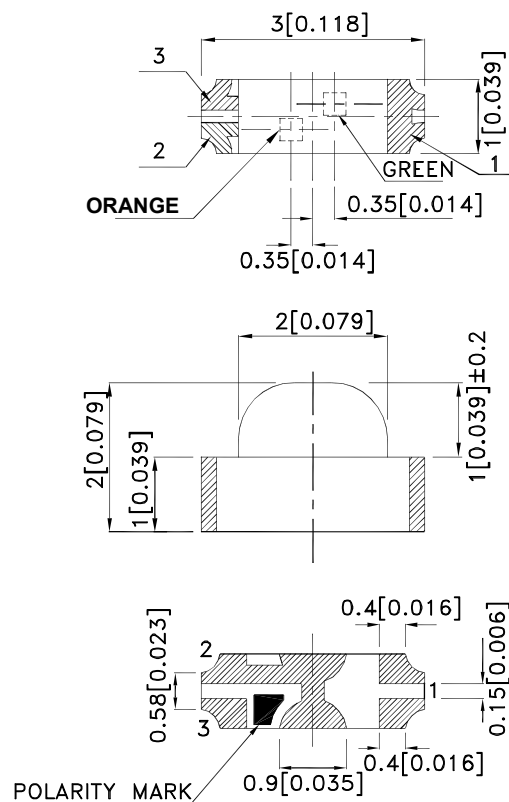
Features

- 3.0mmx2.0mmx1.0mm right angle SMD LED, 1.0mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Package : 2000 pcs / reel.
- Moisture sensitivity level : level 3.
- Tinned pads for improved solderability
- RoHS compliant.

Descriptions

- The Super Bright Orange device is made with AlGaInP (on GaAs substrate) light emitting diode chip.
- The Green source color devices are made with AlGaInP on GaAs substrate Light Emitting Diode.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.15(0.006)$ 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] @ 20mA | | Viewing Angle [1] |
|--------------------|-------------------------------|-------------|------------------------|------|----------------------|
| | | | Min. | Typ. | 2θ1/2 |
| APBA3010SEKCGKC-GX | Super Bright Orange (AlGaInP) | Water Clear | 120 | 320 | 140° |
| | | | *80 | *150 | |
| | Green (AlGaInP) | | 40 | 70 | |
| | | | *40 | *70 | |

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 Green | 610 574 | | nm | IF=20mA |
| λD [1] | Dominant Wavelength | Super Bright Orange Green | 601 570 | | nm | IF=20mA |
| Δλ1/2 | Spectral Line Half-width | Super Bright Orange Green | 29 20 | | nm | IF=20mA |
| C | Capacitance | Super Bright Orange Green | 15 15 | | pF | VF=0V;f=1MHz |
| VF [2] | Forward Voltage | Super Bright Orange Green | 2.1 2.1 | 2.5 2.5 | V | IF=20mA |
| IR | Reverse Current | Super Bright Orange Green | | 10 10 | uA | VR = 5V |

Notes:

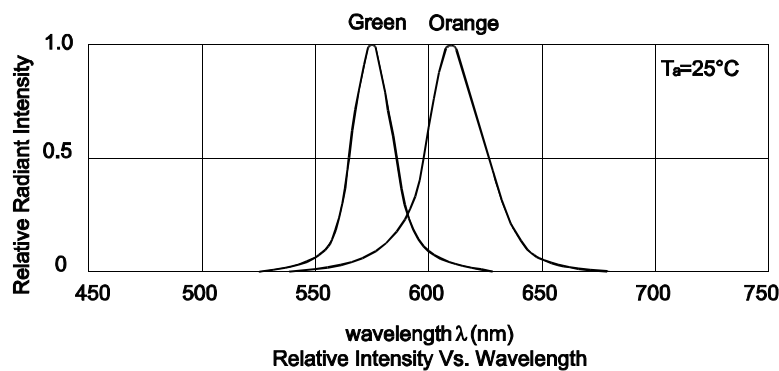
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.
3. Wavelength value is traceable to CIE127-2007 standards.
4. Excess driving current and / or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

Absolute Maximum Ratings at TA=25°C

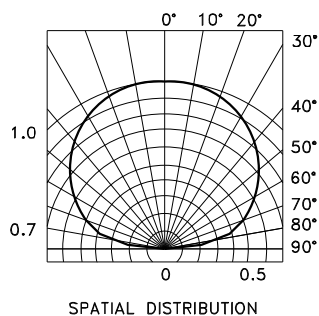
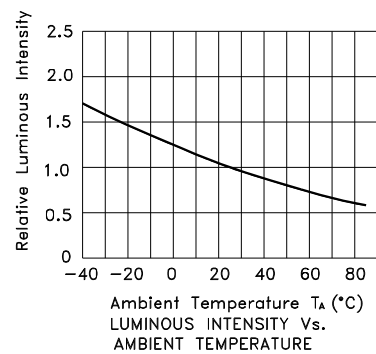
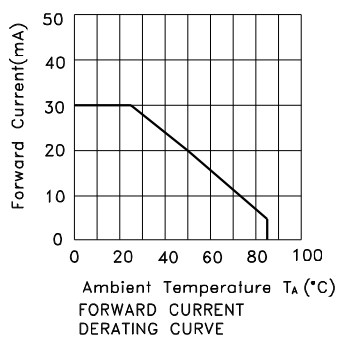
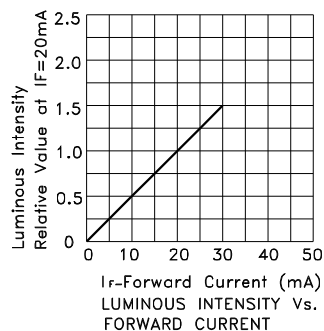
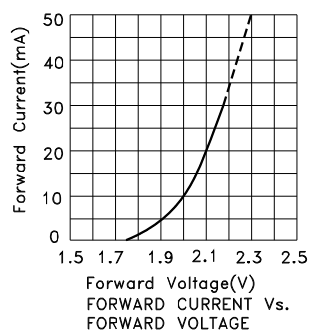
| Parameter | Super Bright Orange | Green | Units |
|--------------------------|---------------------|-------|-------|
| Power dissipation | 75 | 75 | mW |
| DC Forward Current | 30 | 30 | mA |
| Peak Forward Current [1] | 195 | 150 | mA |
| Reverse Voltage | 5 | | V |
| Operating Temperature | -40°C To +85°C | | |
| Storage Temperature | -40°C To +85°C | | |

Notes:

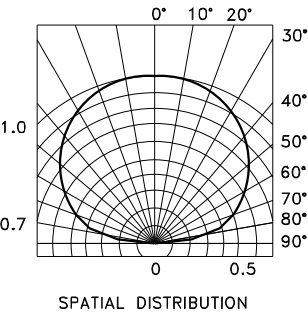
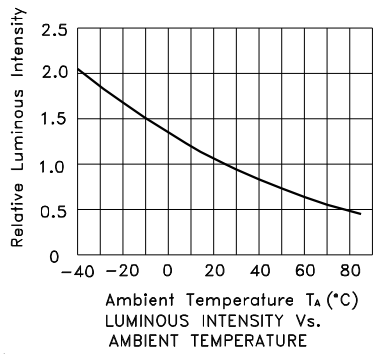
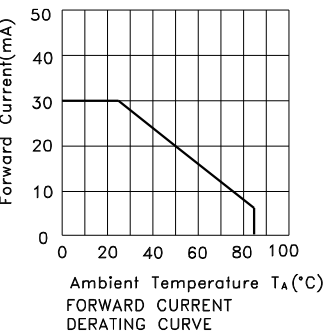
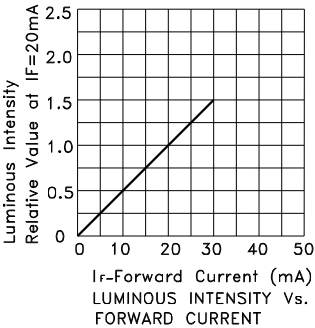
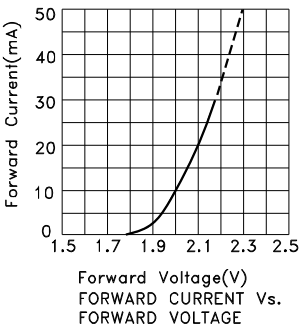
1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. Relative humidity levels maintained between 40% and 60% in production area are recommended to avoid the build-up of static electricity – Ref JEDEC/JESD625-A and JEDEC/J-STD-033.



APBA3010SEKCGKC-GX
Super Bright Orange

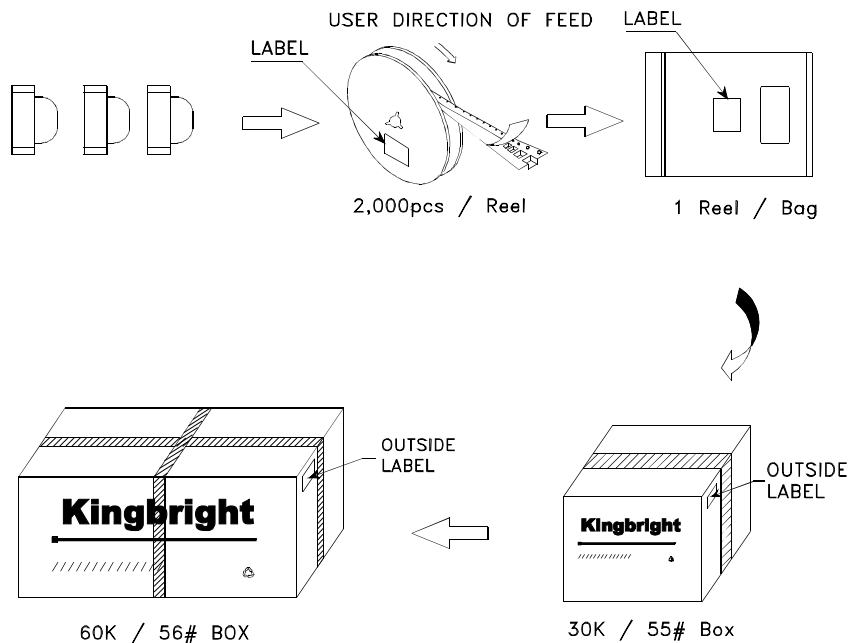



Green



PACKING & LABEL SPECIFICATIONS

APBA3010SEKCGKC-GX



| | |
|--|---|
| Kingbright | |
| P/N0: APBA3010XXX | |
| QTY: 2,000 pcs | Q.C. <div>Q C xx-xx-xxxx PASSED</div> |
| S/N: XXXX | |
| CODE: XXX | |
| LOT NO:  | |
| RoHS Compliant | |

Terms and conditions for the usage of this document

1. The information included in this document reflects representative usage scenarios and is intended for technical reference only.
2. The part number, type, and specifications mentioned in this document are subject to future change and improvement without notice. Before production usage customer should refer to the latest datasheet for the updated specifications.
3. When using the products referenced in this document, please make sure the product is being operated within the environmental and electrical limits specified in the datasheet. If customer usage exceeds the specified limits, Kingbright will not be responsible for any subsequent issues.
4. The information in this document applies to typical usage in consumer electronics applications. If customer's application has special reliability requirements or have life-threatening liabilities, such as automotive or medical usage, please consult with Kingbright representative for further assistance.
5. The contents and information of this document may not be reproduced or re-transmitted without permission by Kingbright.
6. All design applications should refer to Kingbright application notes available at <http://www.KingbrightUSA.com/ApplicationNotes>