

Part Number: APA3010SURCK

Hyper Red

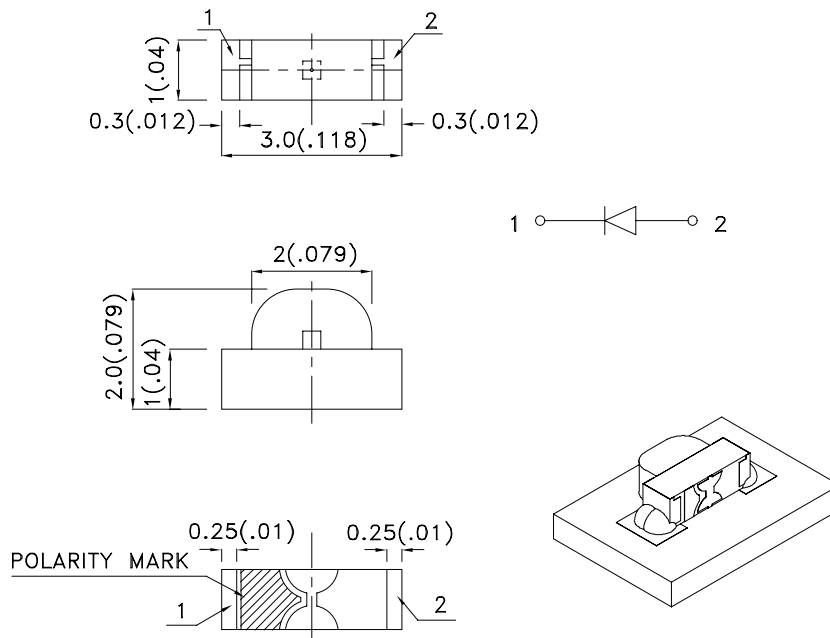
Features

- 3.0mmx1.0mm RIGHT ANGLE SMT LED, 2.0mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACK LIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.

Description

The Hyper Red source color devices are made with DH InGaAlP 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. Specifications are subject to change without notice.
4. The device has a single mounting surface. The device must be mounted according to the specifications.



Selection Guide

| Part No. | Dice | Lens Type | Iv (mcd) [2] @ 20mA | | Viewing Angle [1] |
|--------------|---------------------|-------------|------------------------|------|-------------------|
| | | | Min. | Typ. | 2θ1/2 |
| APA3010SURCK | Hyper Red (InGaAlP) | WATER CLEAR | 110 | 250 | 120° |

Notes:

1. θ1/2 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 | Typ. | Max. | Units | Test Conditions |
|--------|--------------------------|-----------|------|------|-------|-----------------|
| λpeak | Peak Wavelength | Hyper Red | 650 | | nm | IF=20mA |
| λD [1] | Dominant Wavelength | Hyper Red | 635 | | nm | IF=20mA |
| Δλ1/2 | Spectral Line Half-width | Hyper Red | 28 | | nm | IF=20mA |
| C | Capacitance | Hyper Red | 35 | | pF | VF=0V;f=1MHz |
| VF [2] | Forward Voltage | Hyper Red | 1.95 | 2.5 | V | IF=20mA |
| IR | Reverse Current | Hyper Red | | 10 | uA | VR=5V |

Notes:

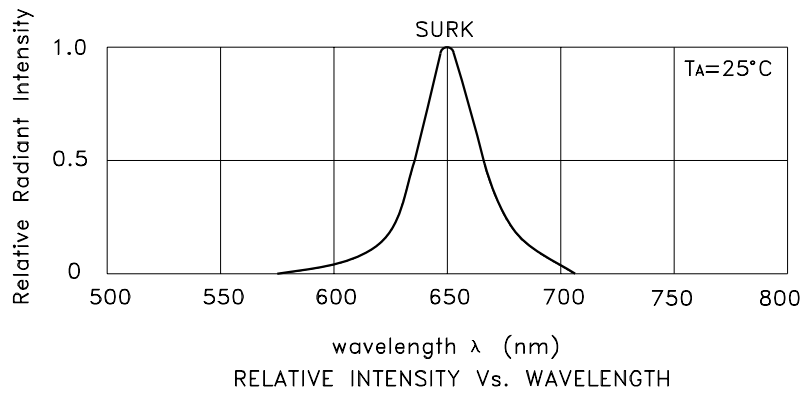
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

| Parameter | Hyper Red | Units |
|--------------------------|----------------|-------|
| Power dissipation | 75 | mW |
| DC Forward Current | 30 | mA |
| Peak Forward Current [1] | 185 | mA |
| Reverse Voltage | 5 | V |
| Operating Temperature | -40°C To +85°C | |
| Storage Temperature | -40°C To +85°C | |

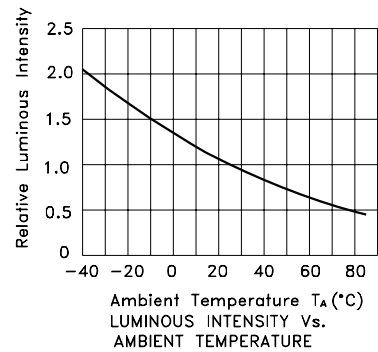
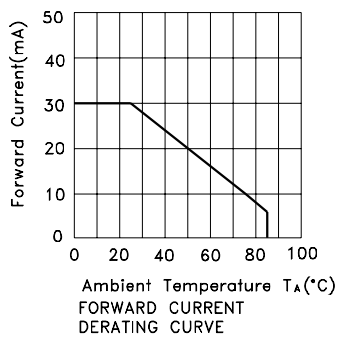
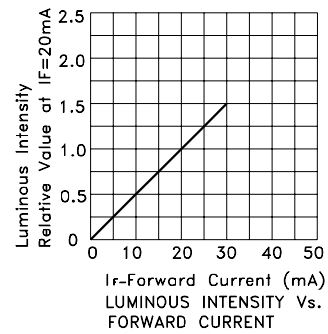
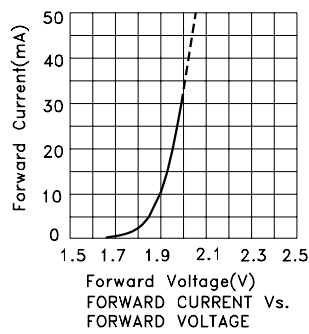
Note:

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



Hyper Red

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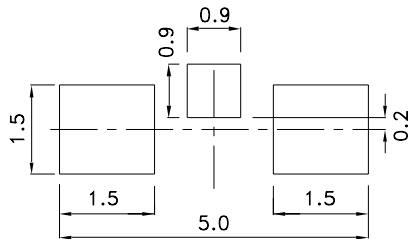
Reflow Soldering Profile For Lead-free SMT Process.



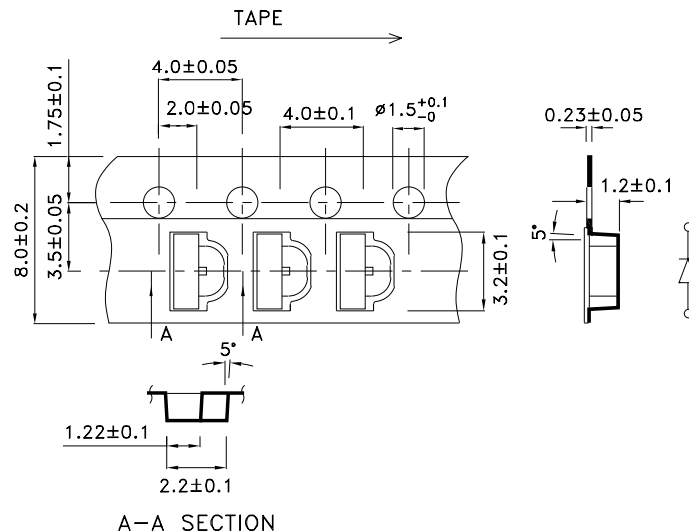
NOTES:

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)

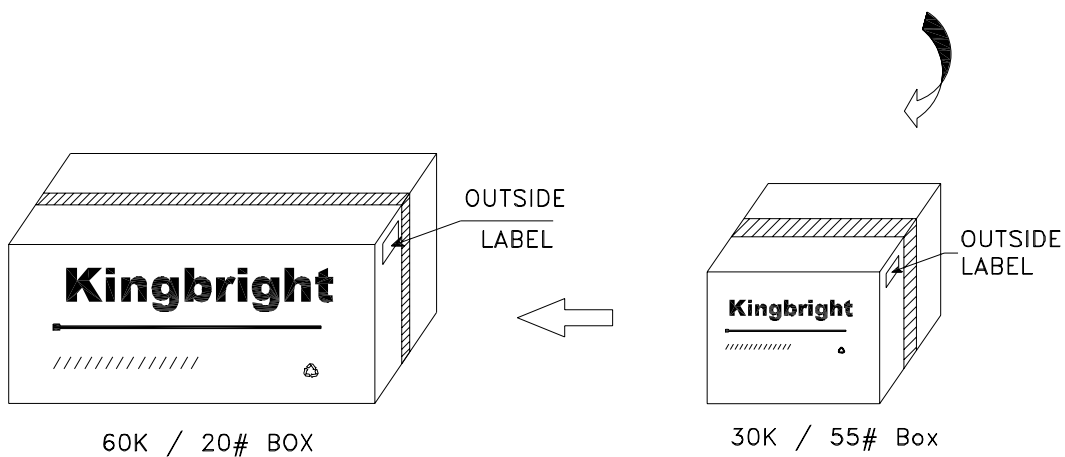
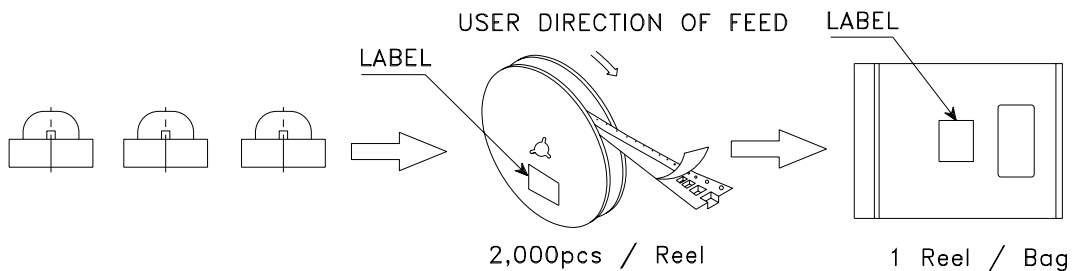


Tape Specifications (Units : mm)



PACKING & LABEL SPECIFICATIONS

APA3010SURCK



| | |
|--|--|
| <h2 style="margin: 0;">Kingbright</h2> | |
| P/NO: APA3010xxx | |
| QTY: 2,000 pcs | Q.C. Q C xx xx xxxx PASSED |
| S/N: XXXX | |
| CODE: XXX | |
| LOT NO: | |
| | |
| MADE IN CHINA | RoHS Compliant |