

Part Number: APJA2107SURCK

Hyper Red

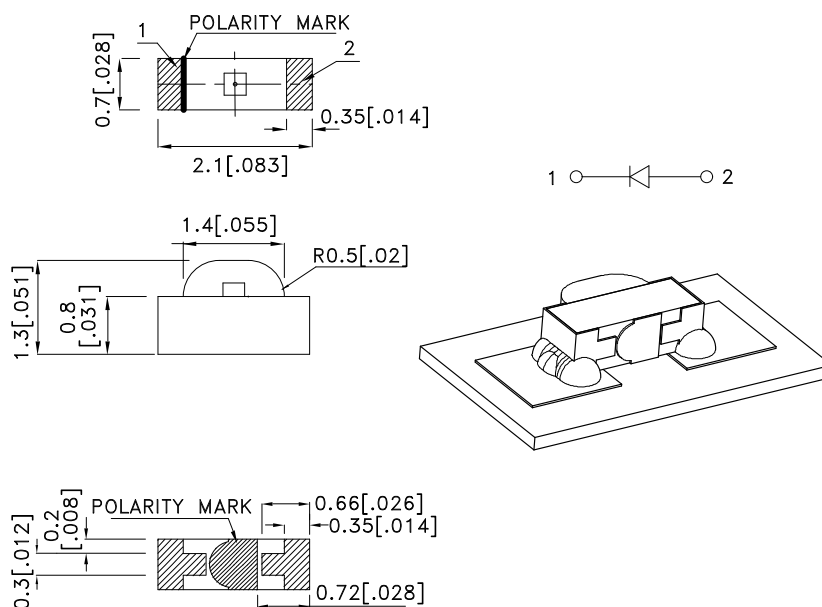
Features

- 2.1x0.7mm right angle SMT LED, 1.3mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight 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 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. 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 |
| APJA2107SURCK | Hyper Red (AlGaInP) | 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 | 630 | | 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:

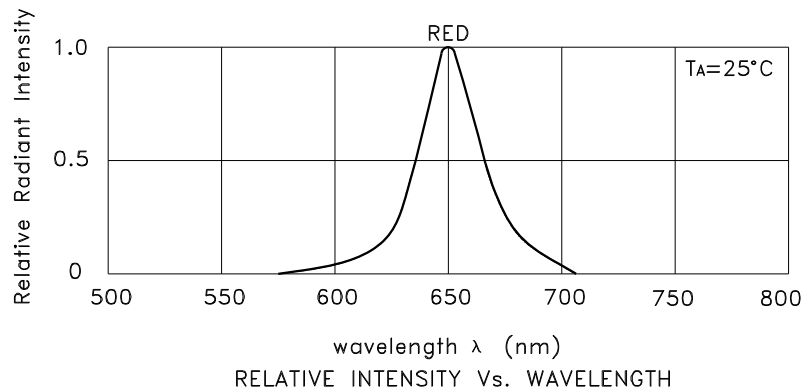
- 1.Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

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 | |

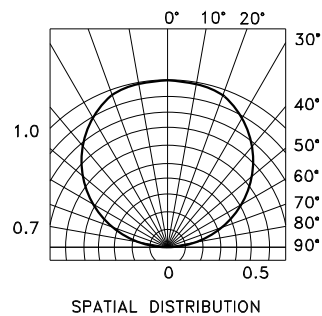
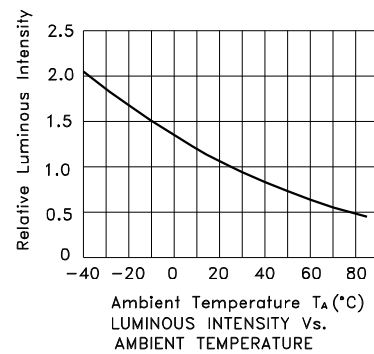
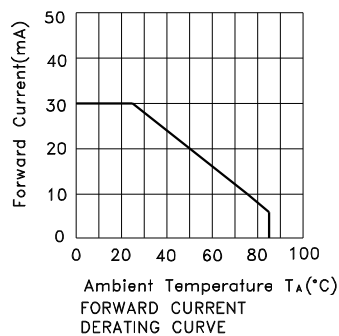
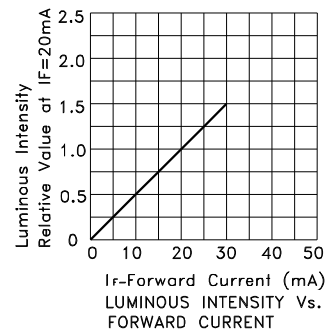
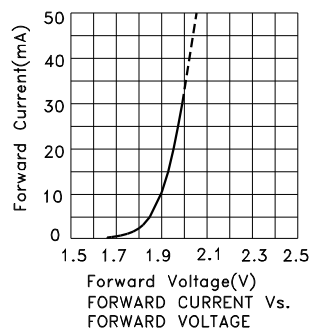
Note:

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



Hyper Red

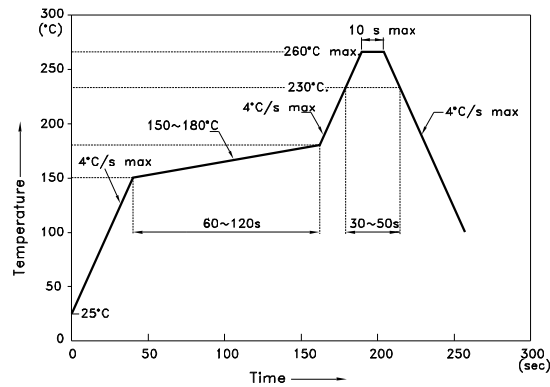
APJA2107SURCK



APJA2107SURCK

**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.**

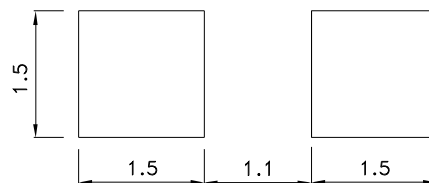
Reflow Soldering Profile For Lead-free SMT Process.



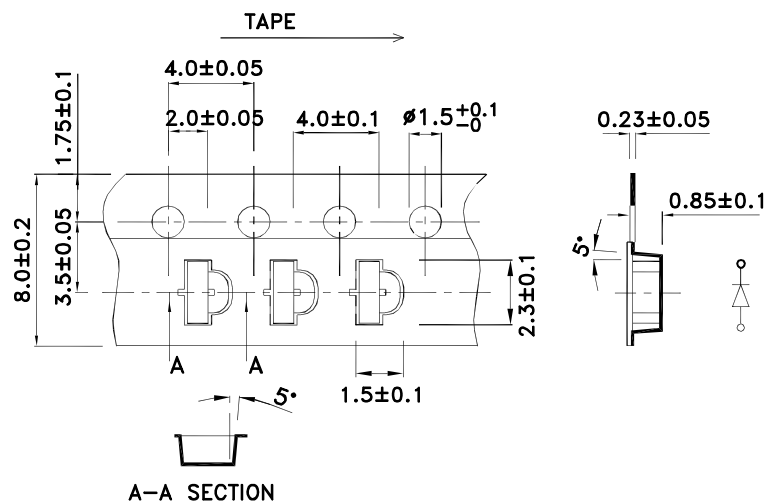
NOTES:

- 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)

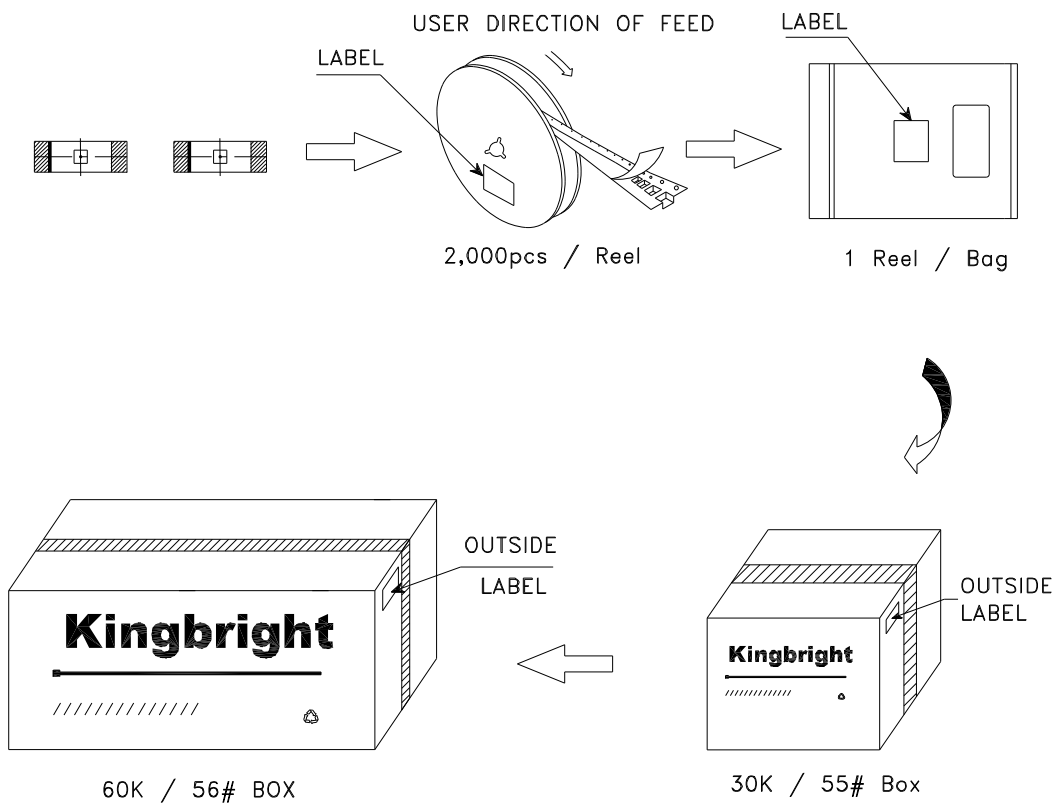



Tape Dimensions (Units : mm)



PACKING & LABEL SPECIFICATIONS

APJA2107SURCK



| | | |
|--|------|------------|
| Kingbright | | |
| P/N0: APJA2107xxx | | |
| QTY: 2,000 pcs | Q.C. | Q C |
| S/N: XXXX | | xx xx xxxx |
| CODE: XXX | | PASSED |
| LOT NO: | | |
|  | | |
| RoHS Compliant | | |

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Kingbright:](#)

[APJA2107SURCK](#)