

Part Number: APA2106SECK/J3-PRV Hyper Red

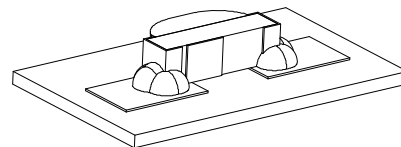
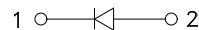
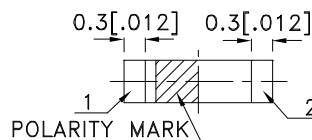
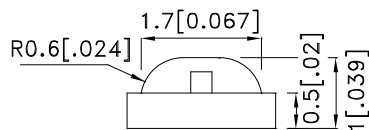
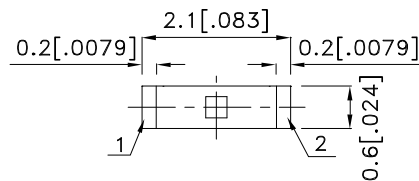
### Features

- 2.1mmX0.6mm right angle SMT LED, 1.0mm 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.
- Tinned pads for improved solderability.
- RoHS compliant.

### Description

The Hyper Red device is based on light emitting diode chip made from AlGaInP.

### Package Dimensions



#### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.1$  (0.004") 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.           | Dice                | Lens Type   | Iv (mcd) [2]<br>@ 20mA |      | Viewing<br>Angle [1] |
|--------------------|---------------------|-------------|------------------------|------|----------------------|
|                    |                     |             | Min.                   | Typ. | 2θ1/2                |
| APA2106SECK/J3-PRV | Hyper Red (AlGaInP) | Water Clear | 700                    | 1100 | 120°                 |
|                    |                     |             | *200                   | *380 |                      |

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 the CIE127-2007 compliant national standards.

## Electrical / Optical Characteristics at TA=25°C

| Symbol | Parameter                | Device    | Typ. | Max. | Units | Test Conditions |
|--------|--------------------------|-----------|------|------|-------|-----------------|
| λpeak  | Peak Wavelength          | Hyper Red | 640  |      | nm    | IF=20mA         |
| λD [1] | Dominant Wavelength      | Hyper Red | 625  |      | nm    | IF=20mA         |
| Δλ1/2  | Spectral Line Half-width | Hyper Red | 20   |      | nm    | IF=20mA         |
| C      | Capacitance              | Hyper Red | 27   |      | pF    | VF=0V;f=1MHz    |
| VF [2] | Forward Voltage          | Hyper Red | 2.2  | 2.8  | V     | IF=20mA         |
| IR     | Reverse Current          | Hyper Red |      | 10   | uA    | VR=5V           |

Notes:

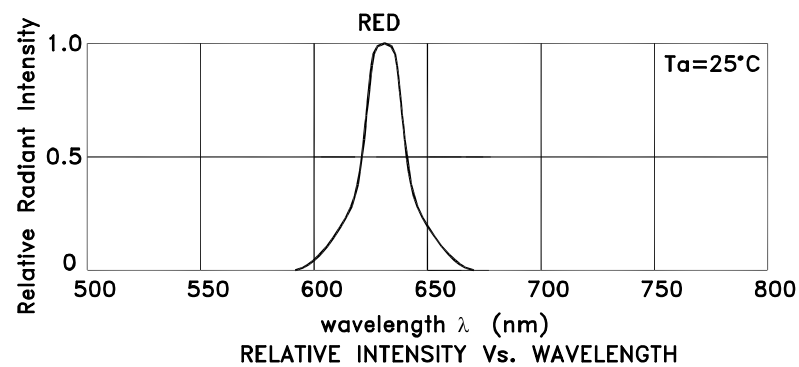
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.
3. Wavelength value is traceable to the CIE127-2007 compliant national standards.

## Absolute Maximum Ratings at TA=25°C

| Parameter                | Hyper Red      | Units |
|--------------------------|----------------|-------|
| Power dissipation        | 84             | mW    |
| DC Forward Current       | 30             | mA    |
| Peak Forward Current [1] | 150            | mA    |
| Reverse Voltage          | 5              | V     |
| Operating Temperature    | -40°C To +85°C |       |
| Storage Temperature      | -40°C To +85°C |       |

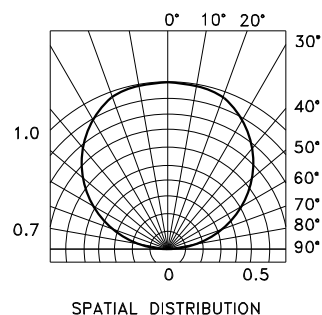
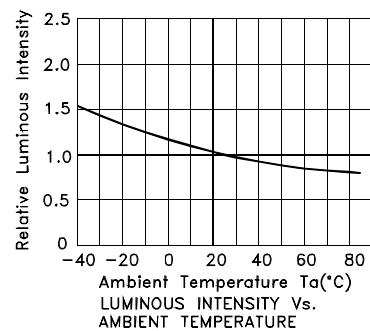
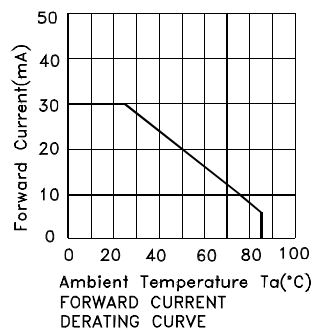
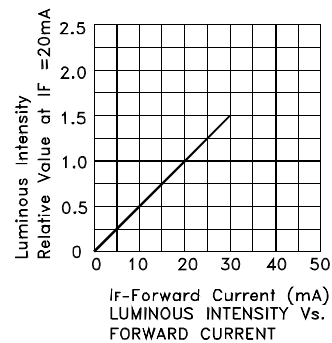
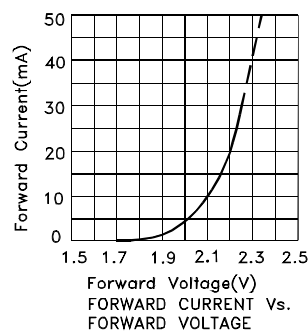
Note:

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



Hyper Red

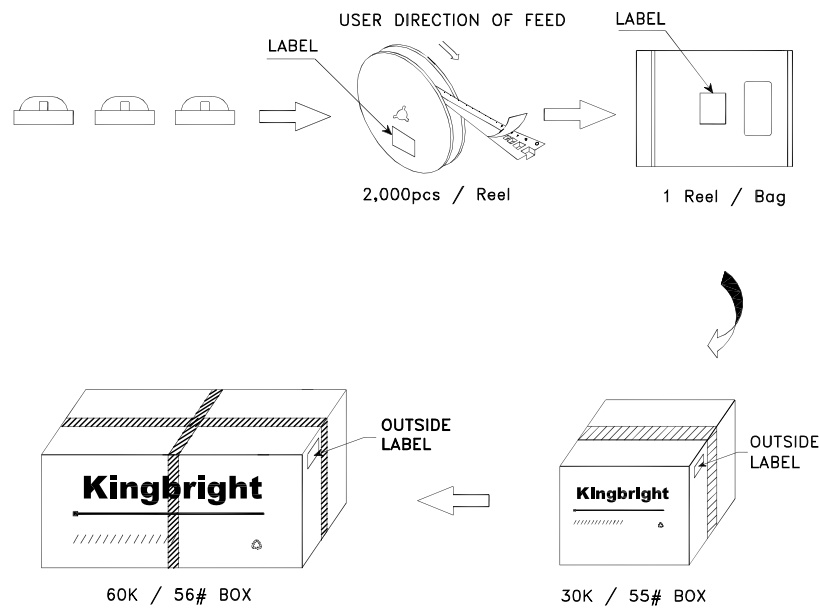
APA2106SECK/J3-PRV





## PACKING & LABEL SPECIFICATIONS

APA2106SECK/J3-PRV



|                                                                                                                         |                                                                                                                    |
|-------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| <b>Kingbright</b>                                                                                                       |                                                                                                                    |
| P/NO: APA2106xxx                                                                                                        |                                                                                                                    |
| QTY: 2,000 pcs                                                                                                          | Q.C. <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">Q C<br/>xx xx xxxx<br/>PASSED</span> |
| S/N: XXXX                                                                                                               |                                                                                                                    |
| CODE: XXX                                                                                                               |                                                                                                                    |
| LOT NO:                                                                                                                 |                                                                                                                    |
| <br>xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |                                                                                                                    |
| RoHS Compliant                                                                                                          |                                                                                                                    |

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**Наши контакты:**

**Телефон:** +7 812 627 14 35

**Электронная почта:** [sales@st-electron.ru](mailto:sales@st-electron.ru)

**Адрес:** 198099, Санкт-Петербург,  
Промышленная ул, дом № 19, литера Н,  
помещение 100-Н Офис 331