

Part Number: KPA-2106SECK-J3

Hyper Red

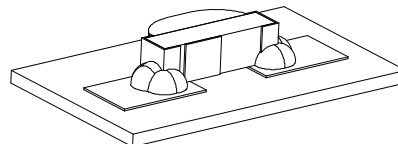
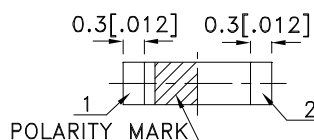
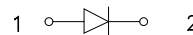
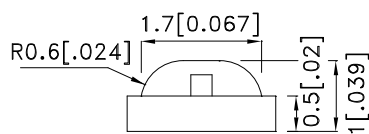
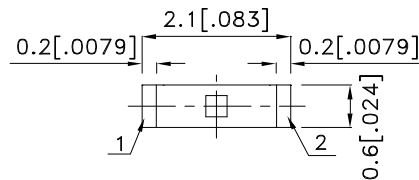
Features

- 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 ± 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] @ 20mA | | Viewing Angle [1] |
|-----------------|---------------------|-------------|------------------------|------|----------------------|
| | | | Min. | Typ. | 2θ1/2 |
| KPA-2106SECK-J3 | 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 |
|--------------------|--------------------------|-----------|------|------|-------|---------------------------|
| λ _{peak} | Peak Wavelength | Hyper Red | 640 | | nm | I _F =20mA |
| λ _D [1] | Dominant Wavelength | Hyper Red | 625 | | nm | I _F =20mA |
| Δλ1/2 | Spectral Line Half-width | Hyper Red | 20 | | nm | I _F =20mA |
| C | Capacitance | Hyper Red | 27 | | pF | V _F =0V;f=1MHz |
| V _F [2] | Forward Voltage | Hyper Red | 2.2 | 2.8 | V | I _F =20mA |
| I _R | Reverse Current | Hyper Red | | 10 | uA | V _R =5V |

Notes:

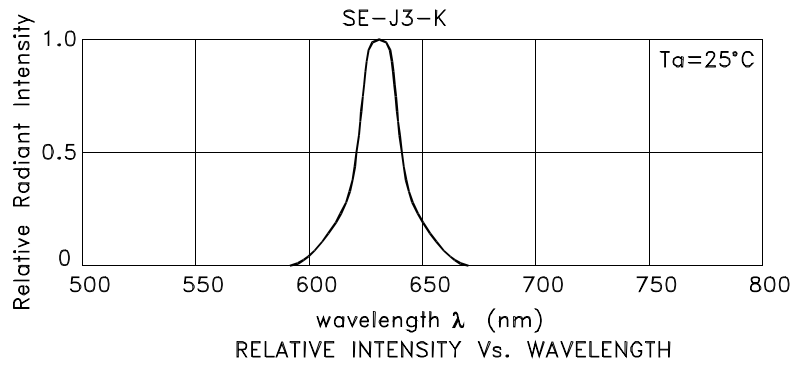
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.
3. Wavelength value is traceable to the CIE127-2007 compliant national standards.

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 | |

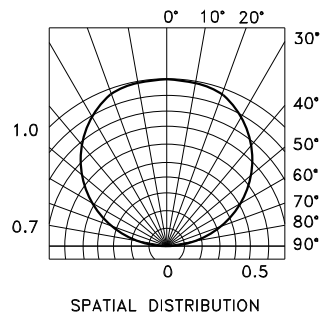
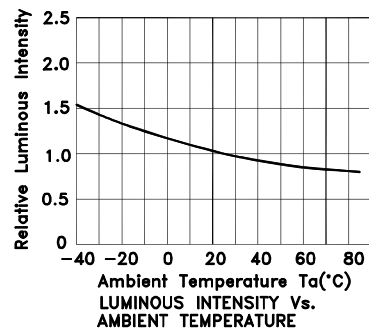
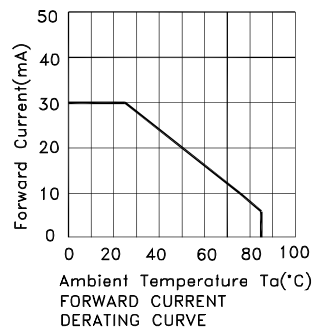
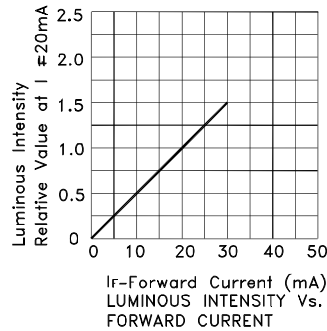
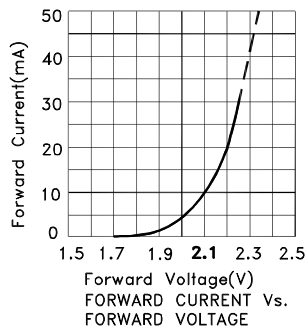
Note:

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



Hyper Red

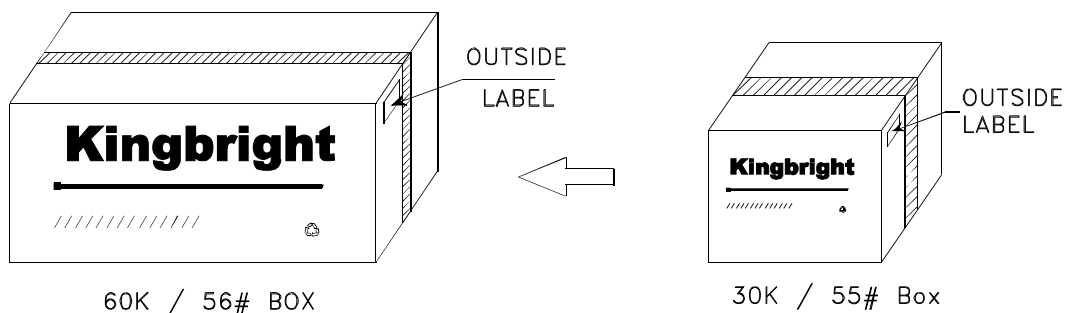
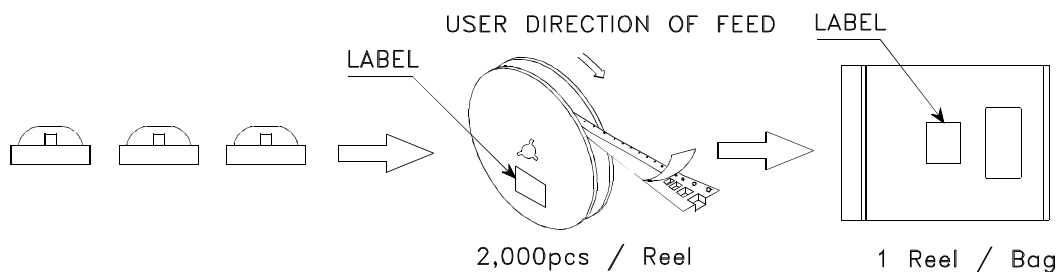
KPA-2106SECK-J3




Kingbright

PACKING & LABEL SPECIFICATIONS

KPA-2106SECK-J3



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|--|--|
| Kingbright | |
| P/NO: KPA-2106XXX | |
| QTY: 2,000 pcs | Q.C. Q C xx xx XXXX PASSED |
| S/N: XXXX | |
| CODE: XXX | |
| LOT NO: | |
|  xxxxxxxxxxxxxxxxxxxxxxxxxxxx | |
| RoHS Compliant | |

Detailed application notes are listed on our website.
http://www.kingbright.com/application_notes