

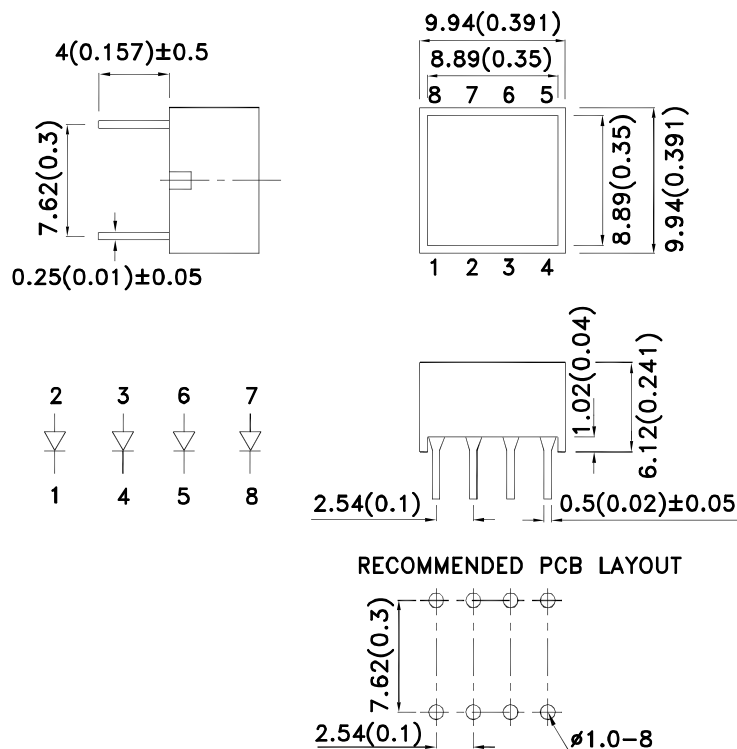
### Features

- Uniform light emitting area.
- Low current operation.
- Easily mounted on P.C. boards.
- Flush mountable.
- Excellent on/off contrast.
- Can be used with panels and legend mounts.
- RoHS compliant.

### Description

The Hyper Red source color devices are made with Al-GaN on GaAs substrate Light Emitting Diode.

### Package Dimensions & Internal Circuit Diagram



Notes:

1. All dimensions are in millimeters (inches), Tolerance is  $\pm 0.25(0.01)$  unless otherwise noted.
2. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.



## Selection Guide

| Part No.     | Dice                | Lens Type      | Iv (mcd) [1]<br>@ 20mA |      |
|--------------|---------------------|----------------|------------------------|------|
|              |                     |                | Min.                   | Typ. |
| KB-C100SURKW | Hyper Red (AlGaInP) | WHITE DIFFUSED | 280                    | 525  |

Note:

1. Luminous intensity/ luminous Flux: +/-15%.

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

| Symbol                | Parameter                | Device    | Typ. | Max. | Units | Test Conditions           |
|-----------------------|--------------------------|-----------|------|------|-------|---------------------------|
| $\lambda_{peak}$      | Peak Wavelength          | Hyper Red | 650  |      | nm    | I <sub>F</sub> =20mA      |
| $\lambda_D$ [1]       | Dominant Wavelength      | Hyper Red | 630  |      | nm    | I <sub>F</sub> =20mA      |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | Hyper Red | 28   |      | nm    | I <sub>F</sub> =20mA      |
| C                     | Capacitance              | Hyper Red | 35   |      | pF    | V <sub>F</sub> =0V;f=1MHz |
| V <sub>F</sub> [2]    | Forward Voltage          | Hyper Red | 1.95 | 2.5  | V     | I <sub>F</sub> =20mA      |
| I <sub>R</sub>        | Reverse Current          | Hyper Red |      | 10   | uA    | V <sub>R</sub> =5V        |

Notes:

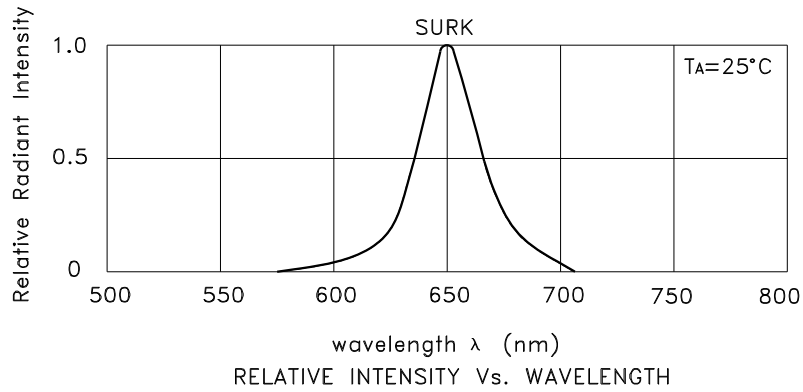
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

## 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 / Storage Temperature | -40°C To +85°C        |       |
| Lead Solder Temperature[2]      | 260°C For 3-5 Seconds |       |

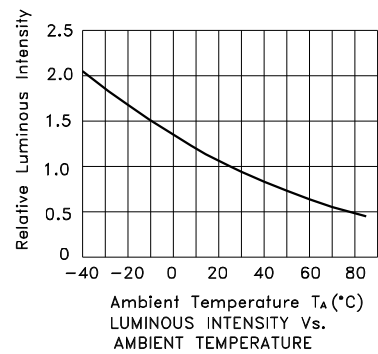
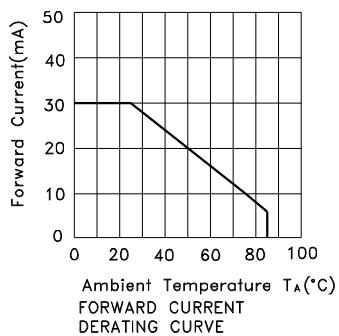
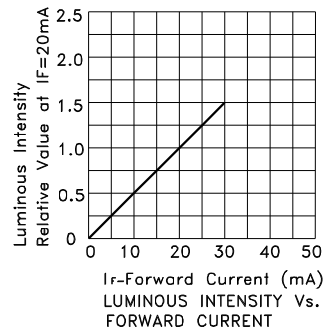
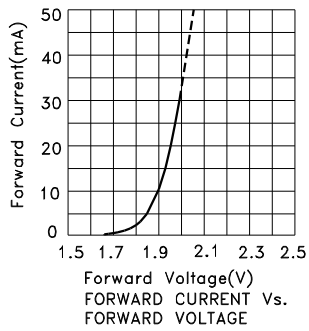
Notes:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 2mm below package base.



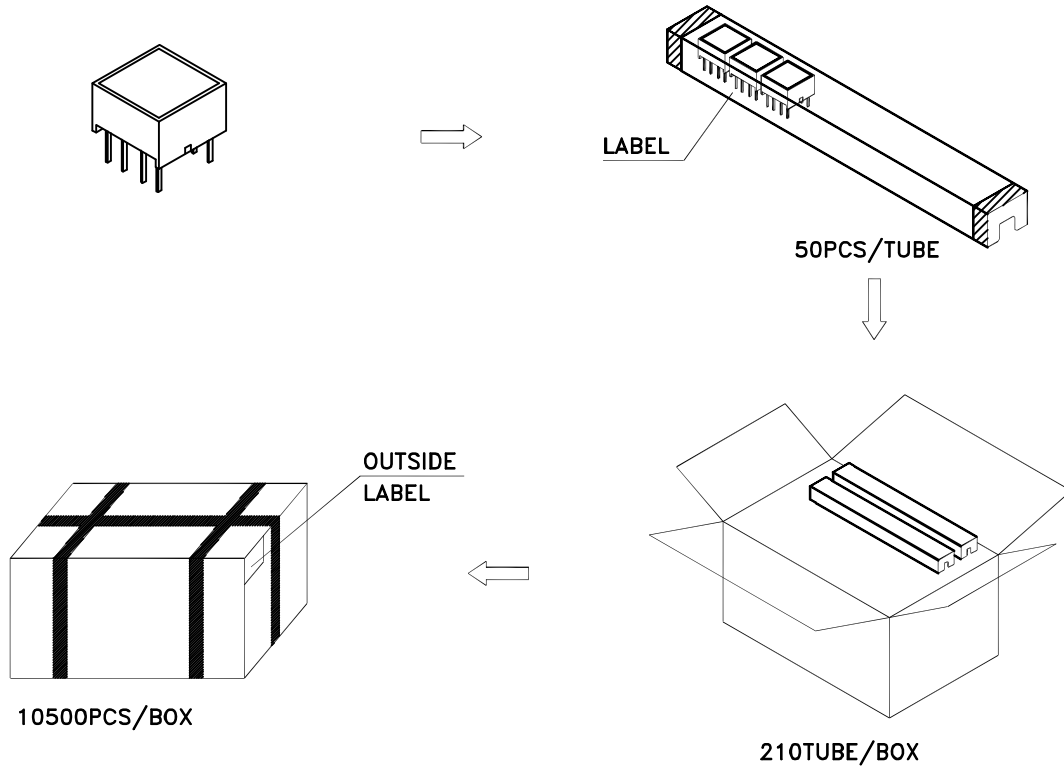
## Hyper Red

### KB-C100SURKW

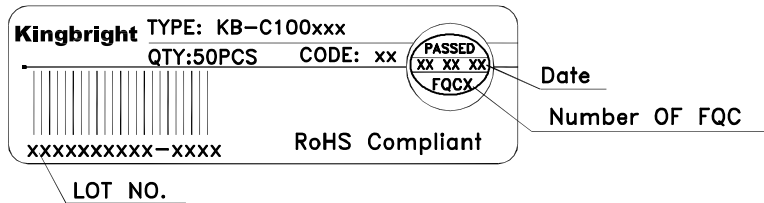


**PACKING & LABEL SPECIFICATIONS**

**KB-C100SURKW**



Inside Label Paste On The IC-tube



Outside Label Paste On The Box

