

Part Number: DC10SURKCGKWA

Hyper Red  
Green

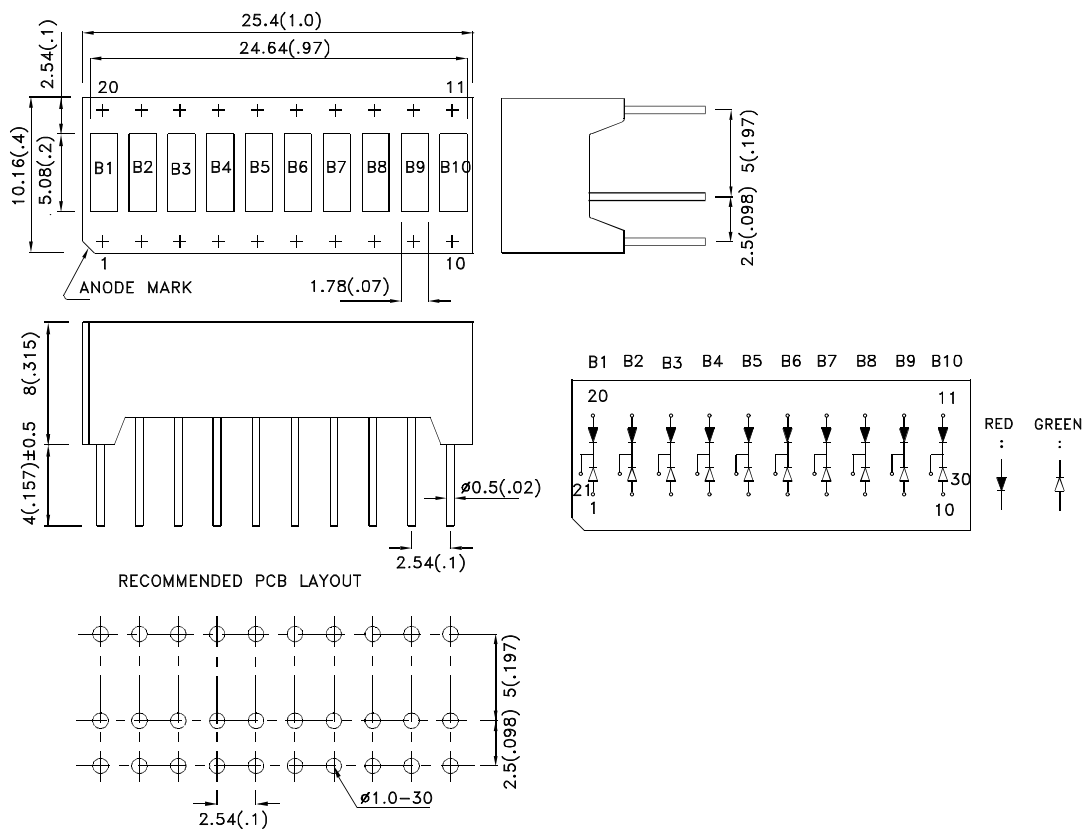
### Features

- Suitable for level indicators.
- Low current operation.
- Excellent on/off contrast.
- End stackable.
- Mechanically rugged.
- Standard : gray face, white segment.
- RoHS compliant.

### Description

The Hyper Red source color devices are made with Al-GaN on GaAs substrate Light Emitting Diode.  
The Green source color devices are made with AlGaInP 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 (ucd) [1]<br>@ 10mA |       | Description                     |
|---------------|---------------------|----------------|------------------------|-------|---------------------------------|
|               |                     |                | Min.                   | Typ.  |                                 |
| DC10SURKCGKWA | Hyper Red (AlGaInP) | WHITE DIFFUSED | 8000                   | 31000 | 10 Segments<br>Bargraph-Display |
|               | Green (AlGaInP)     |                | 8000                   | 39390 |                                 |

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<br>Green | 650<br>574  |            | nm    | I <sub>F</sub> =20mA      |
| $\lambda_D$ [1]       | Dominant Wavelength      | Hyper Red<br>Green | 630<br>570  |            | nm    | I <sub>F</sub> =20mA      |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | Hyper Red<br>Green | 28<br>20    |            | nm    | I <sub>F</sub> =20mA      |
| C                     | Capacitance              | Hyper Red<br>Green | 35<br>15    |            | pF    | V <sub>F</sub> =0V;f=1MHz |
| V <sub>F</sub> [2]    | Forward Voltage          | Hyper Red<br>Green | 1.95<br>2.1 | 2.5<br>2.5 | V     | I <sub>F</sub> =20mA      |
| I <sub>R</sub>        | Reverse Current          | Hyper Red<br>Green |             | 10         | uA    | V <sub>R</sub> =5V        |

Notes:

1. Wavelength: +/-1nm.

2. Forward Voltage: +/-0.1V.

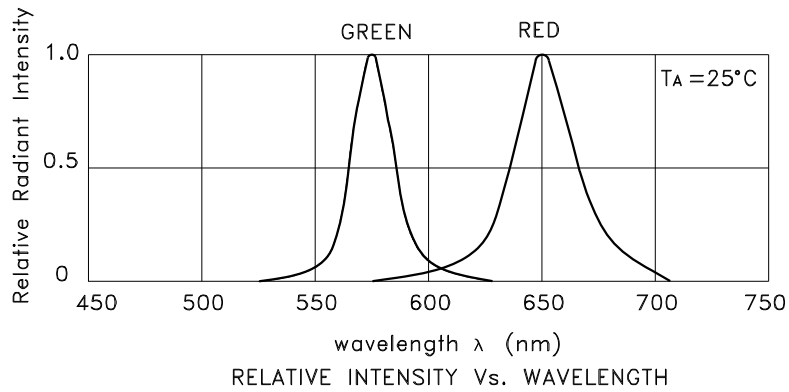
## Absolute Maximum Ratings at TA=25°C

| Parameter                     | Hyper Red             | Green | Units |
|-------------------------------|-----------------------|-------|-------|
| Power dissipation             | 75                    | 75    | mW    |
| DC Forward Current            | 30                    | 30    | mA    |
| Peak Forward Current [1]      | 185                   | 150   | mA    |
| Reverse Voltage               | 5                     |       | V     |
| Operating/Storage Temperature | -40°C To +85°C        |       |       |
| Lead Solder Temperature [2]   | 260°C For 3-5 Seconds |       |       |

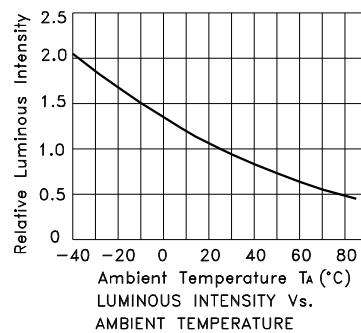
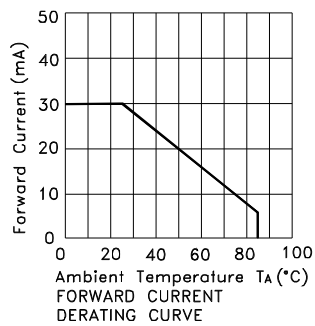
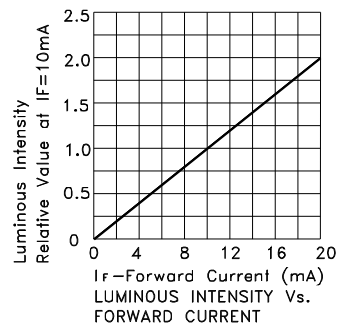
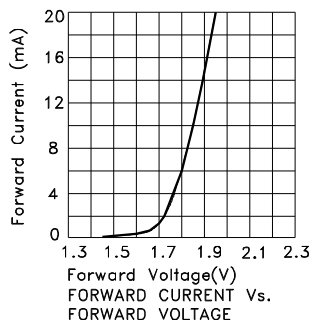
Notes:

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

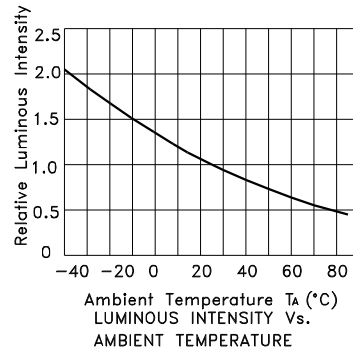
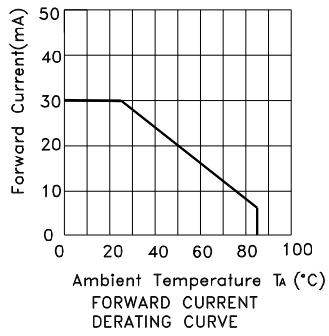
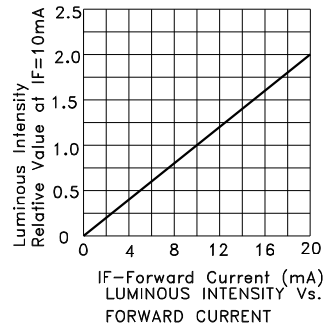
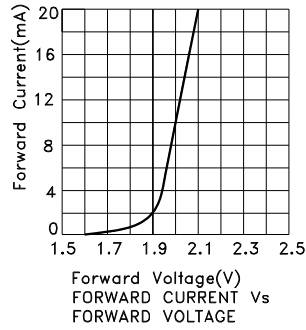
2. 2mm below package base.



## DC10SURKCGKWA Hyper Red

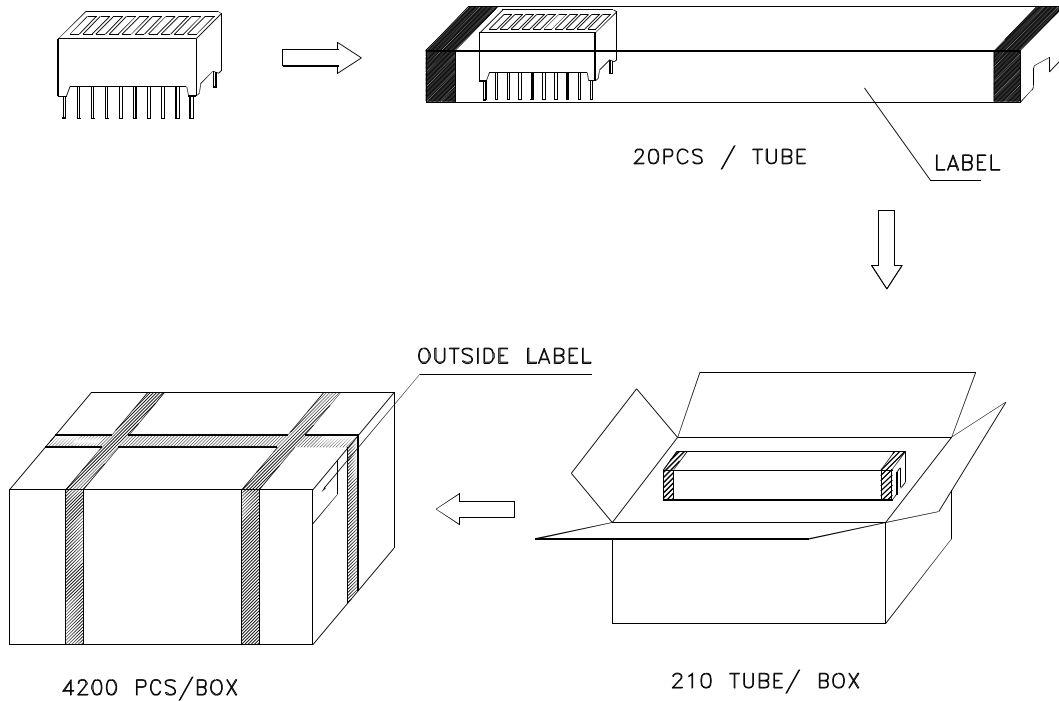


## Green

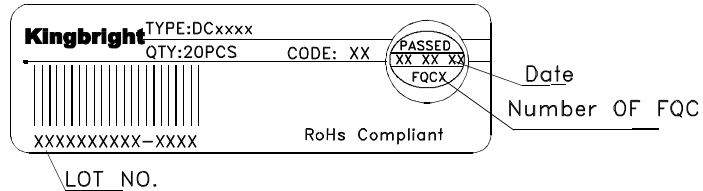


**PACKING & LABEL SPECIFICATIONS**

**DC10SURKCGKWA**



Inside Label Paste On The IC-tube



Outside Label Paste On The Box

