

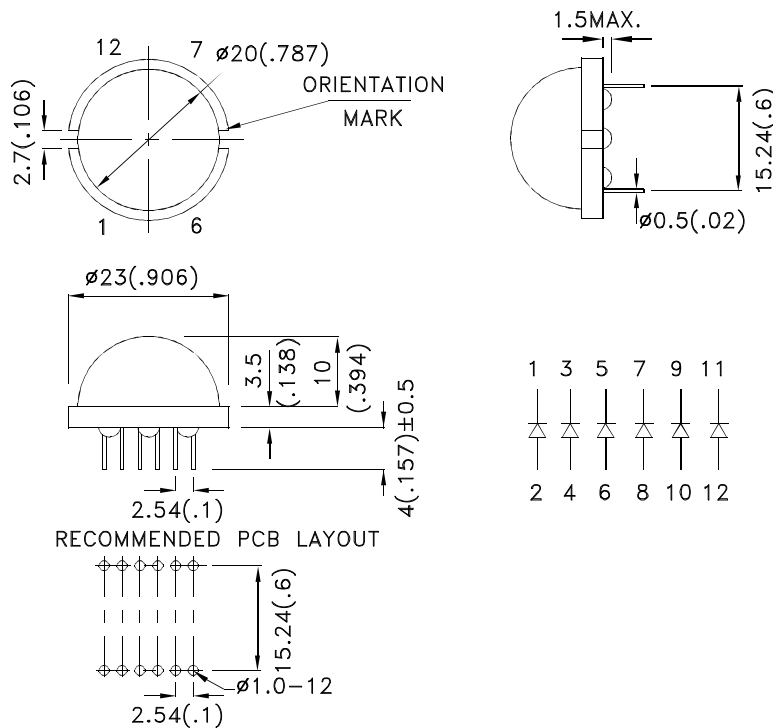
### Features

- 12 pins.
- High luminous intensity.
- Low power consumption.
- Wide viewing angle.
- Categorized for luminous intensity.
- Excellent on / off contrast.
- Easy mounting on P.C. board or sockets.
- Solid state reliability.
- RoHS compliant.

### Description

The Super Bright Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

### Package Dimensions



#### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25(0.01)$ " unless otherwise noted.
3. Lead spacing is measured where the leads emerge from the package.
4. 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) [2]<br>@ 20mA |      | Viewing<br>Angle [1] |
|----------|--------------------------|----------------|------------------------|------|----------------------|
|          |                          |                | Min.                   | Typ. | 2 $\theta$ 1/2       |
| DLC/6SGD | Super Bright Green (GaP) | GREEN DIFFUSED | 40                     | 99   | 120°                 |

Notes:

1.  $\theta$ 1/2 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           |
|-----------------------|--------------------------|--------------------|------|------|-------|---------------------------|
| $\lambda_{peak}$      | Peak Wavelength          | Super Bright Green | 565  |      | nm    | I <sub>F</sub> =20mA      |
| $\lambda_D$ [1]       | Dominant Wavelength      | Super Bright Green | 568  |      | nm    | I <sub>F</sub> =20mA      |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | Super Bright Green | 30   |      | nm    | I <sub>F</sub> =20mA      |
| C                     | Capacitance              | Super Bright Green | 15   |      | pF    | V <sub>F</sub> =0V;f=1MHz |
| V <sub>F</sub> [2]    | Forward Voltage          | Super Bright Green | 2.2  | 2.5  | V     | I <sub>F</sub> =20mA      |
| I <sub>R</sub>        | Reverse Current          | Super Bright Green |      | 10   | uA    | V <sub>R</sub> = 5V       |

Notes:

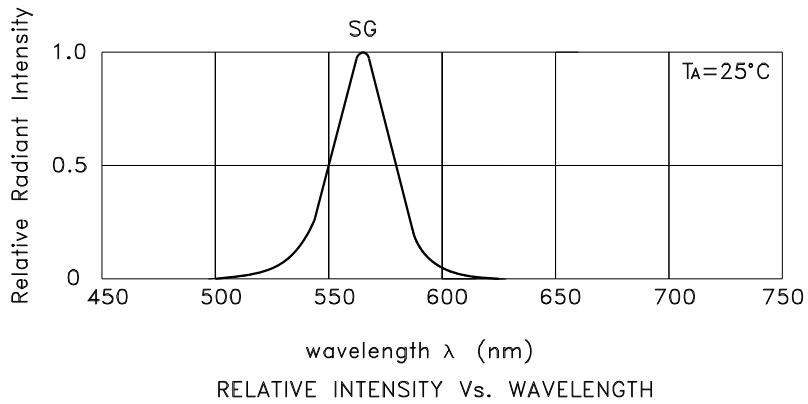
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

## Absolute Maximum Ratings at TA=25°C

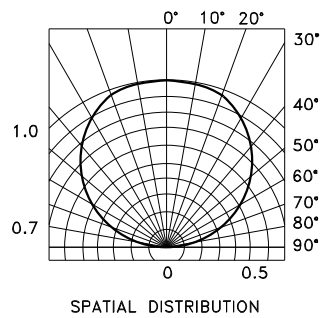
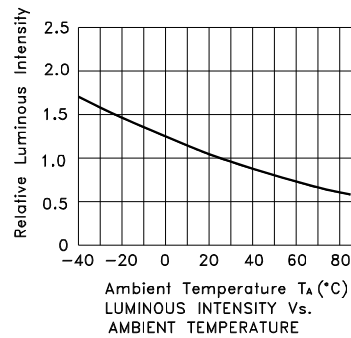
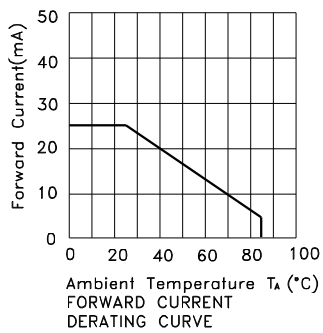
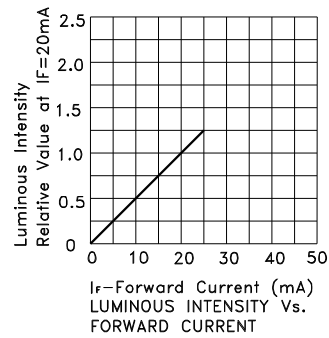
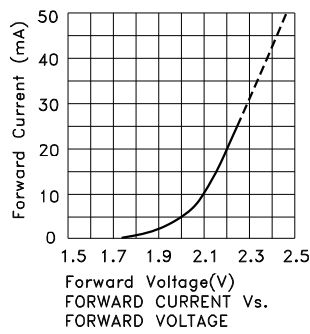
| Parameter                     | Super Bright Green    | Units |
|-------------------------------|-----------------------|-------|
| Power dissipation             | 62.5                  | mW    |
| DC Forward Current            | 25                    | mA    |
| Peak Forward Current [1]      | 140                   | 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.

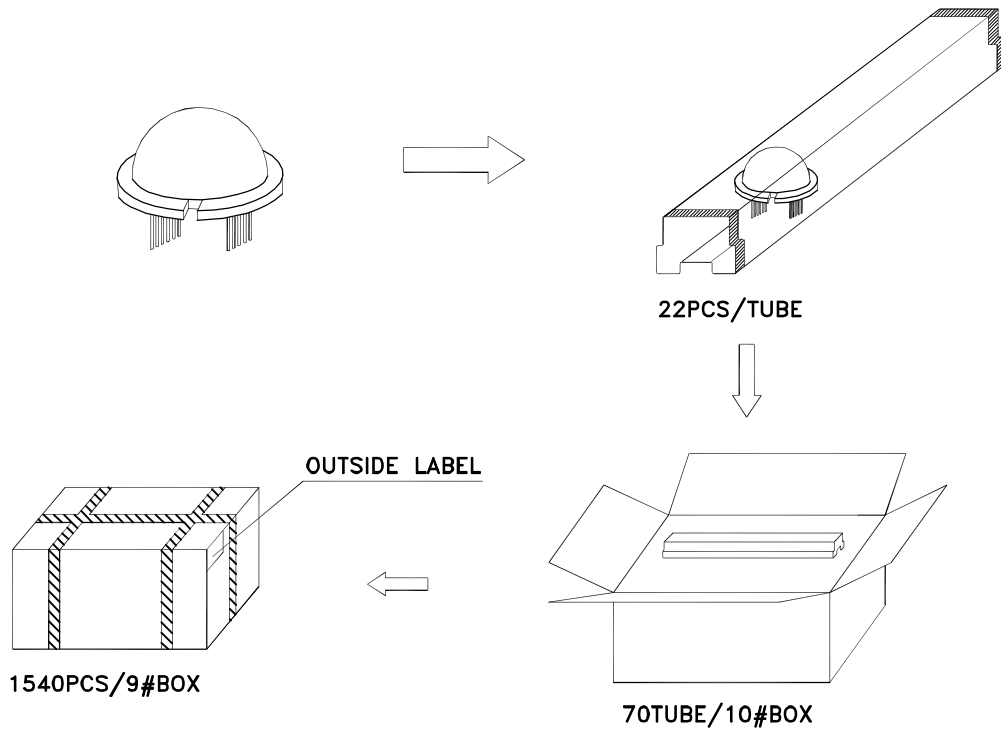


## Super Bright Green DLC/6SGD

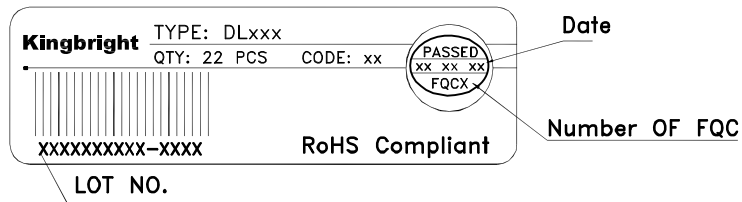


**PACKING & LABEL SPECIFICATIONS**

**DLC/6SGD**



**Inside Label On IC-tube**



**Outside Label On 9#BOX**

