Features
- 1.6mmX0.8mm SMT LED, 0.75mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Moisture sensitivity level: level 3.
- RoHS compliant.

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

Package Dimensions
## Selection Guide

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Dice</th>
<th>Lens Type</th>
<th>θ (\frac{1}{2})</th>
<th>Viewing Angle [1]</th>
</tr>
</thead>
<tbody>
<tr>
<td>KPT-1608SGC</td>
<td>Super Bright Green (GaP) Water Clear</td>
<td></td>
<td>5</td>
<td>12</td>
</tr>
</tbody>
</table>

Notes:
1. \(θ\) \(\frac{1}{2}\) is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
2. Luminous intensity / luminous Flux: +/-15%.
3. Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

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

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Parameter</th>
<th>Device</th>
<th>Typ.</th>
<th>Max.</th>
<th>Units</th>
<th>Test Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>(\lambda_{\text{peak}})</td>
<td>Peak Wavelength</td>
<td>Super Bright Green</td>
<td>565</td>
<td>nm</td>
<td></td>
<td>(I_f=20\text{mA})</td>
</tr>
<tr>
<td>(\lambda_D) [1]</td>
<td>Dominant Wavelength</td>
<td>Super Bright Green</td>
<td>568</td>
<td>nm</td>
<td></td>
<td>(I_f=20\text{mA})</td>
</tr>
<tr>
<td>(\Delta\lambda_{1/2})</td>
<td>Spectral Line Half-width</td>
<td>Super Bright Green</td>
<td>30</td>
<td>nm</td>
<td></td>
<td>(I_f=20\text{mA})</td>
</tr>
<tr>
<td>C</td>
<td>Capacitance</td>
<td>Super Bright Green</td>
<td>15</td>
<td>pF</td>
<td></td>
<td>(V_i=0\text{V}, f=1\text{MHz})</td>
</tr>
<tr>
<td>(V_F) [2]</td>
<td>Forward Voltage</td>
<td>Super Bright Green</td>
<td>2.2</td>
<td>2.5</td>
<td>V</td>
<td>(I_f=20\text{mA})</td>
</tr>
<tr>
<td>(I_R)</td>
<td>Reverse Current</td>
<td>Super Bright Green</td>
<td>10</td>
<td>(\mu\text{A})</td>
<td>(V_i=5\text{V})</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.
3. Wavelength value is traceable to the CIE127-2007 compliant national standards.
4. Excessive driving current and/or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

### Absolute Maximum Ratings at TA=25°C

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Super Bright Green</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power dissipation</td>
<td>62.5</td>
<td>mW</td>
</tr>
<tr>
<td>DC Forward Current</td>
<td>25</td>
<td>mA</td>
</tr>
<tr>
<td>Peak Forward Current [1]</td>
<td>140</td>
<td>mA</td>
</tr>
<tr>
<td>Reverse Voltage</td>
<td>5</td>
<td>V</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-40°C To +85°C</td>
<td></td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-40°C To +85°C</td>
<td></td>
</tr>
</tbody>
</table>

Note:
1. 1/10 Duty Cycle, 0.1ms Pulse Width.
Super Bright Green  KPT-1608SGC

[Graphs and charts illustrating various electrical characteristics of the LED, including:
- Relative Radiant Intensity vs. Wavelength
- Forward Current vs. Forward Voltage
- Luminous Intensity vs. Forward Current
- Forward Current vs. Ambient Temperature
- Spatial Distribution]
Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

**Recommended Soldering Pattern**
(Units : mm; Tolerance: ± 0.1)

**Reel Dimension**

**Tape Dimensions**
(Units : mm)
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