Specifications:
Dice material : AlInGaP.
Emitted color : Super green.
Lens color : Water clear.
Peak wavelength : 570nm.
Viewing angle : 16 degrees.
Luminous intensity (IV) : 1850mcd.

Electrical/Optical Characteristics at T_a = 25°C

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbol</th>
<th>Minimum</th>
<th>Typical</th>
<th>Maximum</th>
<th>Unit</th>
<th>Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luminous Intensity</td>
<td>IV</td>
<td>900</td>
<td>1850</td>
<td>2700</td>
<td>mcd</td>
<td>IF = 20mA</td>
</tr>
<tr>
<td>Viewing Angle</td>
<td>øθ</td>
<td>16</td>
<td></td>
<td></td>
<td>degrees</td>
<td></td>
</tr>
<tr>
<td>Peak Emission Wavelength</td>
<td>λ</td>
<td>570</td>
<td></td>
<td></td>
<td>nm</td>
<td></td>
</tr>
<tr>
<td>Dominant Wavelength</td>
<td></td>
<td>572</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spectral Line Half-Width</td>
<td>∆λ</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forward Voltage</td>
<td>VF</td>
<td>1.7</td>
<td>2.1</td>
<td>2.6</td>
<td>V</td>
<td>IF = 20mA</td>
</tr>
<tr>
<td>Power Dissipation</td>
<td>Pd</td>
<td>-</td>
<td></td>
<td>85</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Peak Forward Current (Duty 1/10 at 1KHz)</td>
<td>IF (Peak)</td>
<td>-</td>
<td>-</td>
<td>100</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Recommended Operating Current</td>
<td>IF (Rec)</td>
<td>-</td>
<td>20</td>
<td>-</td>
<td>mA</td>
<td>-</td>
</tr>
</tbody>
</table>

Dimensions: Millimetres (Inches)

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### Absolute Maximum Ratings ($T_a = 25°C$)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reverse Voltage</td>
<td>5 Volt</td>
</tr>
<tr>
<td>Reverse Current</td>
<td>$10\mu A \ (V_R = 5V)$</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>-40°C to 85°C</td>
</tr>
<tr>
<td>Storage Temperature Range</td>
<td>-40°C to 100°C</td>
</tr>
<tr>
<td>Lead Soldering Temperature Range</td>
<td>260°C for 5 Seconds</td>
</tr>
<tr>
<td>1.6mm (1/16 inch) from body</td>
<td></td>
</tr>
</tbody>
</table>

**Super Green** ($\text{AlInGaP} \ \lambda = 570\text{nm}$)

**Forward Current vs. Forward Voltage**

**Forward Current Derating Curve**

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Super Green (AlInGaP $\lambda_P = 570\text{nm}$)

Relative Luminous Intensity

![Graph showing Relative Luminous Intensity vs. Forward Current and Ambient Temperature.](image)

Luminous Intensity vs. Forward Current

Luminous Intensity vs. Ambient Temperature

Relative Radiant Intensity

![Graph showing Relative Radiant Intensity vs. Wavelength.](image)

Wavelength $\lambda$ (nm)

Relative Intensity vs. Wavelength

TOLERANCES:

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

DRAWN BY: Geetha  DATE: 27/05/08

CHECKED BY: Suresh  DATE: 27/05/08

APPROVED BY: G. Cook  DATE: 11/06/08

DRAWING TITLE: 5.0mm Round LED Lamp - Super Green

SIZE A  DWG NO. M10001100  ELECTRONIC FILE L053SGC_DWG

SCALE: NTS  U.O.M.: mm (Inches)  SHEET: 3 OF 4

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### Part Number Table

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>LED, 5mm, 16°, Super-Green</td>
<td>MCL053SGC</td>
</tr>
</tbody>
</table>

### TOLERANCES:

- **Unless otherwise specified,** dimensions are for reference purposes only.

### Drawing Information:

- **Drawing Title:** 5.0mm Round LED Lamp - Super Green
- **Drawing Number:** M10001100
- **Electronic File:** L053SGC_DWG
- **Sheet:** 4 of 4
- **Scale:** NTS
- **Units:** mm (Inches)

### Dates:

- **Drawn by:** Geetha, 27/05/08
- **Checked by:** Suresh, 27/05/08
- **Approved by:** G. Cook, 11/06/08

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