

WP1413SGDL

SUPER BRIGHT GREEN

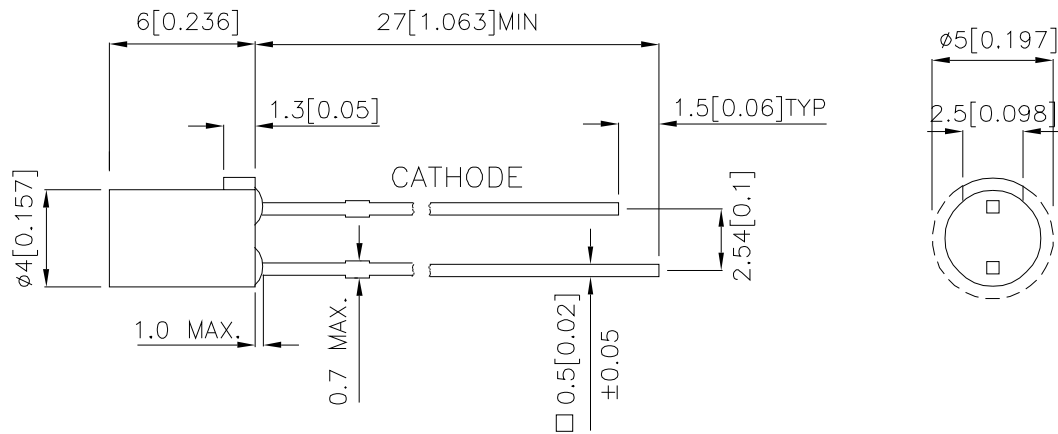
Features

- CYLINDRICAL TYPE, FLAT TOP.
- CONVEX CATHODE MARK ON BODY.
- LOW POWER CONSUMPTION.
- I.C. COMPATIBLE.
- RELIABLE AND RUGGED.
- LONG LIFE - 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. Specifications are subject to change without notice.

Selection Guide

| Part No. | Dice | Lens Type | Iv (mcd) @ 20mA | | Viewing Angle |
|------------|--------------------------|----------------|--------------------|------|------------------|
| | | | Min. | Typ. | 2 θ 1/2 |
| WP1413SGDL | SUPER BRIGHT GREEN (GaP) | GREEN DIFFUSED | 2.6 | 10 | 100° |

Note:

1. θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at T_A=25°C

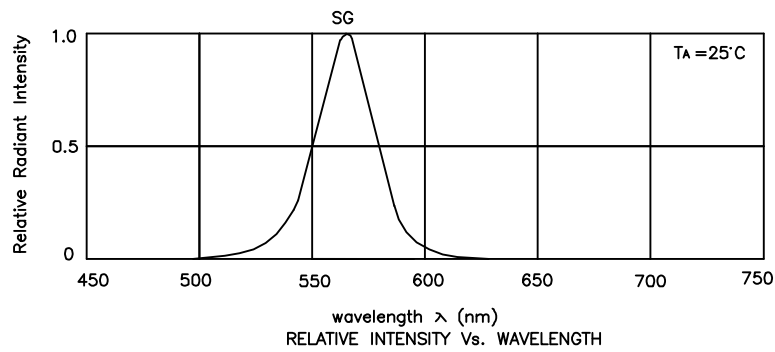
| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|-----------------------|--------------------------|--------------------|------|------|-------|---------------------------|
| λ_{peak} | Peak Wavelength | Super Bright Green | 565 | | nm | I _F =20mA |
| λ_D | Dominant Wavelength | Super Bright Green | 568 | | nm | I _F =20mA |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | Super Bright Green | 30 | | nm | I _F =20mA |
| C | Capacitance | Super Bright Green | 15 | | pF | V _F =0V;f=1MHz |
| V _F | Forward Voltage | Super Bright Green | 2.2 | 2.5 | V | I _F =20mA |
| I _R | Reverse Current | Super Bright Green | | 10 | uA | V _R = 5V |

Absolute Maximum Ratings at T_A=25°C

| Parameter | Super Bright Green | Units |
|-------------------------------|---------------------|-------|
| Power dissipation | 105 | 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 Seconds | |
| Lead Solder Temperature [3] | 260°C For 5 Seconds | |

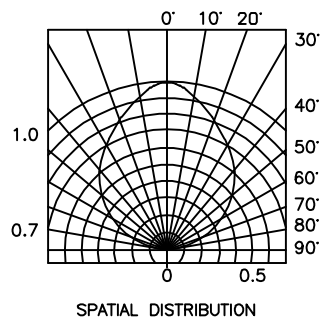
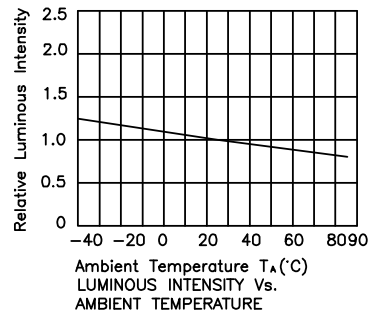
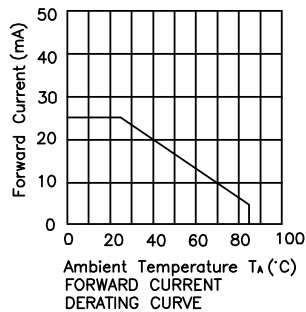
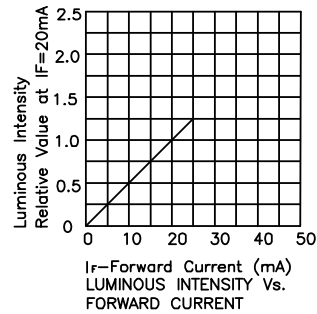
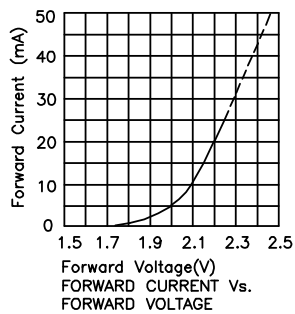
Notes:

- 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2mm below package base.
- 5mm below package base.



Super Bright Green

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Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: $\pm 1\text{nm}$
2. Luminous Intensity: $\pm 15\%$
3. Forward Voltage: $\pm 0.1\text{V}$

Note: Accuracy may depend on the sorting parameters.