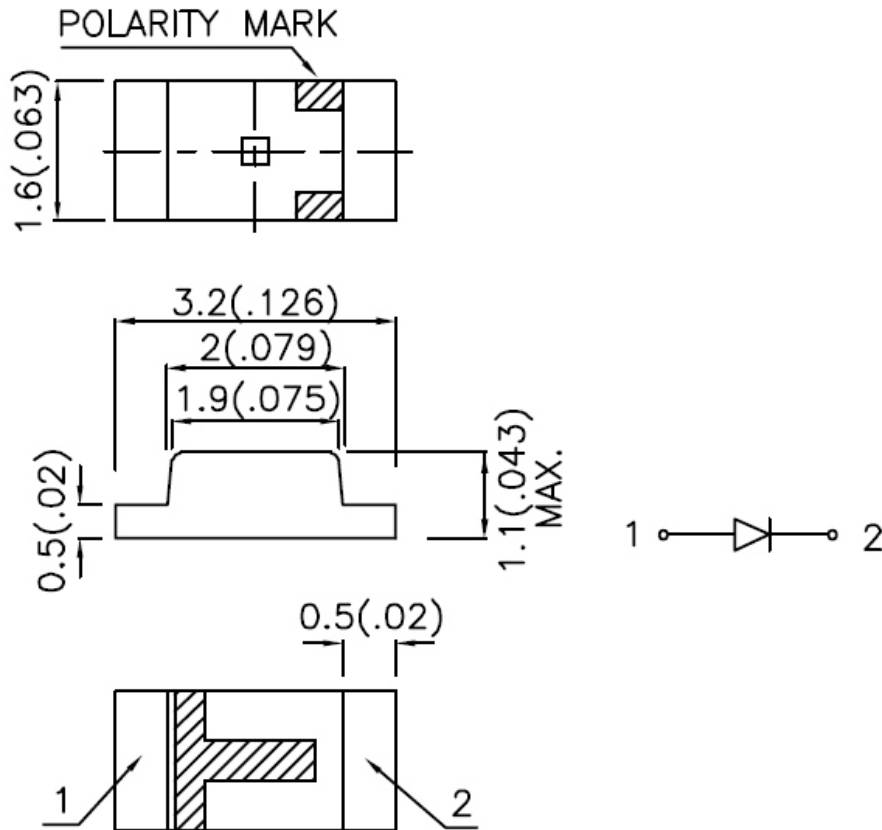


Package Dimensions



Features

- 3.2mmx1.6mm SMT LED, 1.1mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.
- RoHS COMPLIANT.

Description

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

LED-VGR-11-LF
LEADFREE

RoHS Compliant

MORETHANALL
CONNECTORS
ASSEMBLIES

PART NO. **LED-VGR-11**

DWG NO. **LED-VGR-11**

CHECKED BY CY

TOLERANCES ARE

DESCRIP TION:

FILE NO.

DRAWING BY

.X ± 0.2
.XX ±
.XXX ±
AWG

AREA

REVISIONS

HK

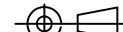
DATE

煜倫股份有限公司

UNIT / mm

SCALE 1:1

PROJECTION



Selection Guide

| Part No. | Dice | Lens Type | Iv (mcd) @ 20 mA | | Viewing Angle |
|------------|--------------------------|----------------|---------------------|------|------------------|
| | | | Min. | Typ. | 2θ1/2 |
| LED-VGR-11 | SUPER BRIGHT GREEN (GaP) | WHITE DIFFUSED | 4 | 15 | 120° |

Note:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at TA=25°C

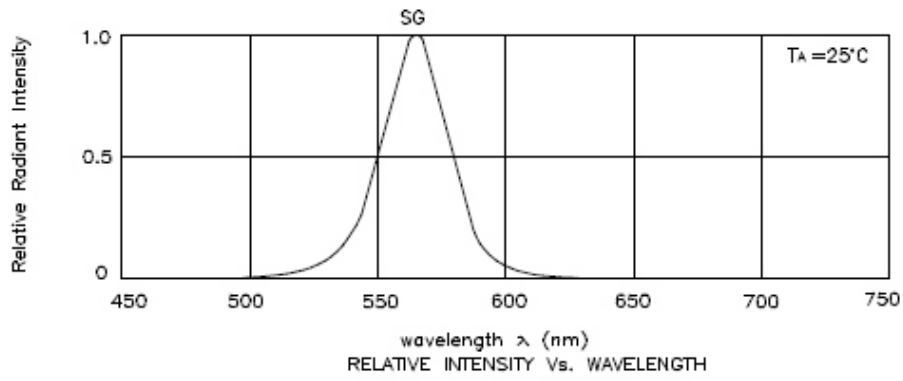
| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|--------|--------------------------|--------------------|------|------|-------|-----------------|
| λpeak | Peak Wavelength | Super Bright Green | 565 | | nm | IF=20mA |
| λD | Dominant Wavelength | Super Bright Green | 568 | | nm | IF=20mA |
| Δλ1/2 | Spectral Line Half-width | Super Bright Green | 30 | | nm | IF=20mA |
| C | Capacitance | Super Bright Green | 15 | | pF | VF=0V;f=1MHz |
| VF | Forward Voltage | Super Bright Green | 2.2 | 2.5 | V | IF=20mA |
| IR | Reverse Current | Super Bright Green | | 10 | uA | VR = 5V |

Absolute Maximum Ratings at TA=25°C

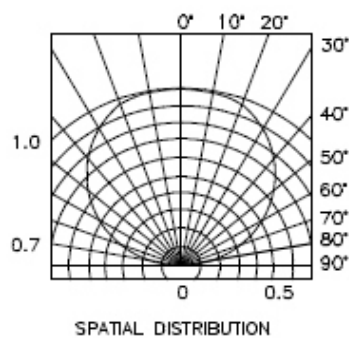
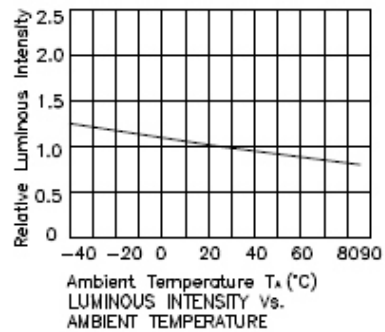
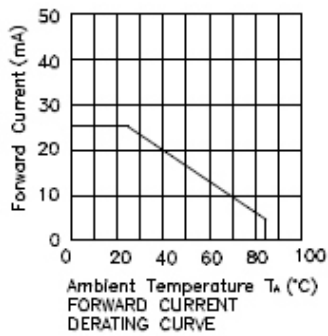
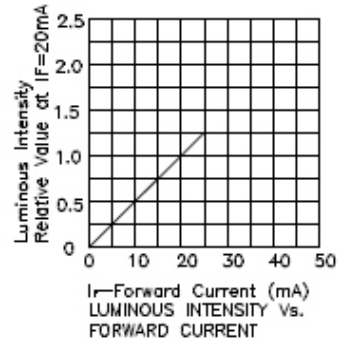
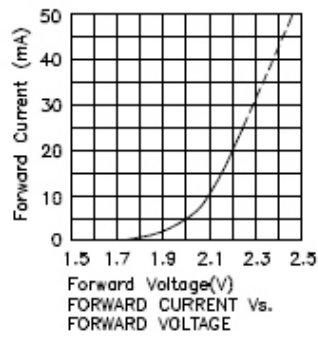
| Parameter | Super Bright Green | Units |
|-------------------------------|--------------------|-------|
| Power dissipation | 105 | mW |
| DC Forward Current | 25 | mA |
| Peak Forward Current [1] | 140 | mA |
| Reverse Voltage | 5 | V |
| Operating/Storage Temperature | -40°C To +85°C | |

Note:

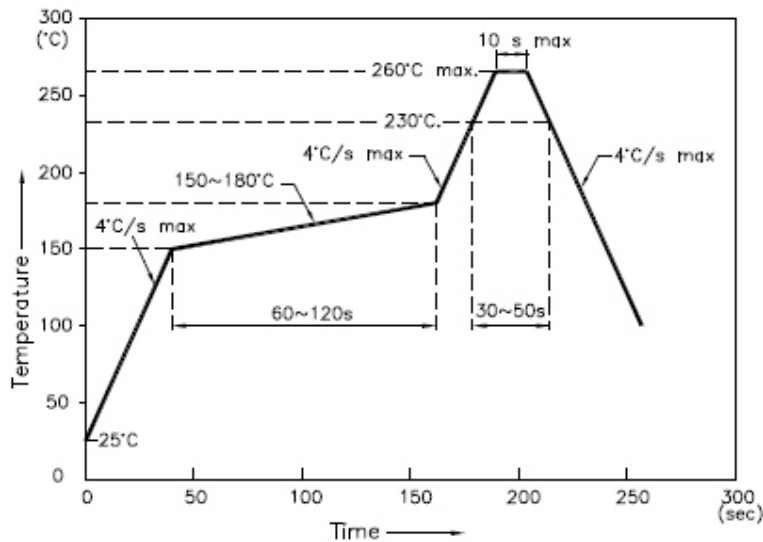
1. 1/10 Duty Cycle, 0.1ms Pulse Width.



Super Bright Green



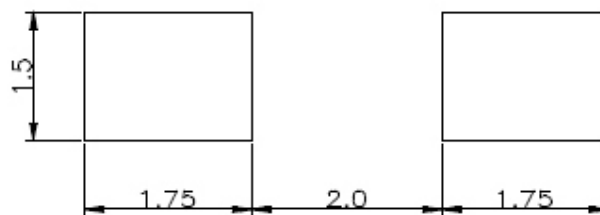
Reflow Soldering Profile For Lead-free SMT Process.



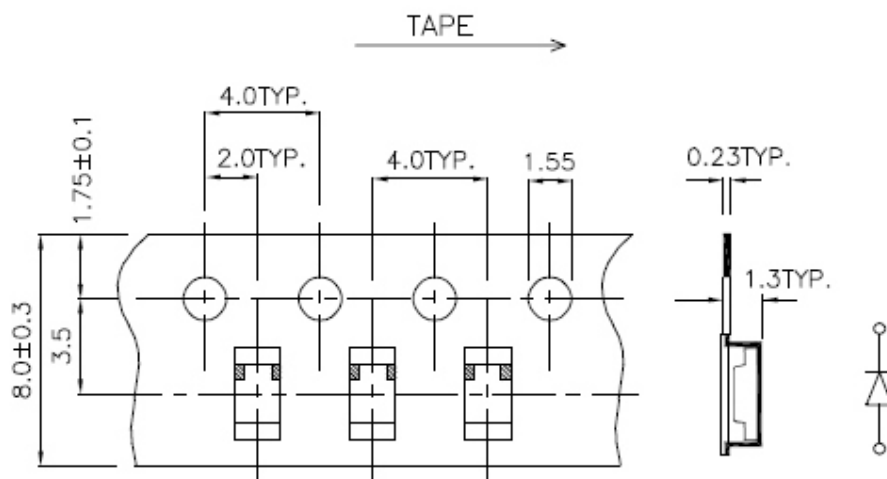
NOTES:

1. We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.
2. Don't cause stress to the epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.

**Recommended Soldering Pattern
(Units : mm)**



**Tape Specifications
(Units : mm)**



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: +/-1nm
2. Luminous Intensity: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.