

Surface Mount Green Chip LED - 0805

multicomp PRO

**RoHS
Compliant**



Features

- 2mm × 1.25mm SMT LED, 0.7mm Thickness.
- Wide Viewing Angle.
- Ideal For Backlight And Indicator.
- Various Colours and Lens Types Available.

Applications

- Automotive: Backlighting in dashboard and switch.
- Telecommunication: Indicator and Backlighting in telephone and fax.
- Flat Backlight for LCD switch and symbol.

Device Selection Guide

| Part No. | Chip | | Lens Colour |
|----------|----------|----------------|-------------|
| | Material | Emitted Colour | |
| MP005923 | (InGaN) | Green | Water Clear |
| | | | |

Absolute Maximum Ratings at TA=25°C

| Parameter | Symbol | Value | Unit |
|------------------------|------------------|----------------|------|
| Power Dissipation | P _D | 100 | mW |
| Forward Current | I _F | 25 | mA |
| Peak Forward Current*1 | I _{FP} | 100 | mA |
| Reverse Voltage | V _R | 5 | V |
| Operating Temperature | T _{opr} | -40°C To +85°C | |
| Storage Temperature | T _{stg} | -40°C To +85°C | |

Notes:

*1: Pulse width ≤ 0.1ms, Duty cycle ≤ 1/10

Electrical / Optical Characteristics at TA=25°C

| Parameter | Symbol | Min. | Typ. | Max | Unit | Test Conditions |
|---------------------|-------------------|------|------|------|------|----------------------|
| Forward Voltage | V _F | 2.6 | — | 3.6 | V | I _F =20mA |
| Reverse Current | I _R | — | — | 10 | μA | V _R =5V |
| Dominant Wavelength | λ _D | 518 | — | 530 | nm | I _F =20mA |
| Luminous Intensity | I _v | 845 | — | 1800 | mcd | I _F =20mA |
| Viewing Angle | 2θ _{1/2} | — | 120 | — | Deg. | I _F =20mA |

Remarks:

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

1. wavelength: ±1nm
2. Luminous Intensity: ±15%
3. Forward Voltage: ±0.1V

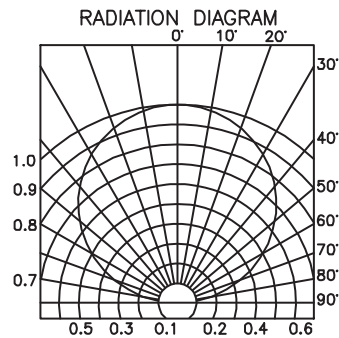
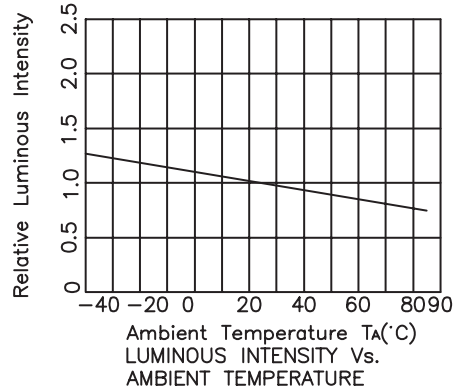
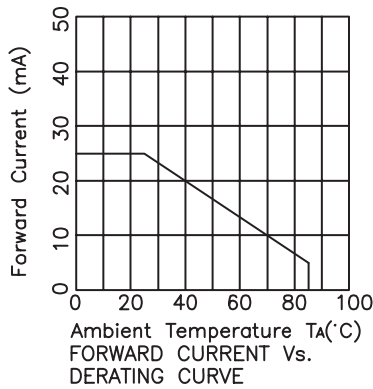
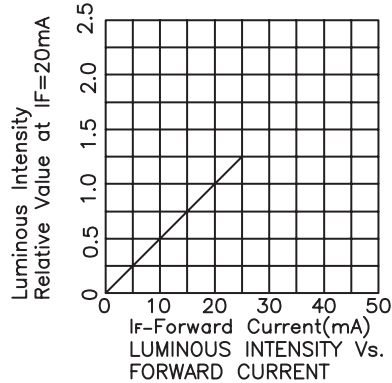
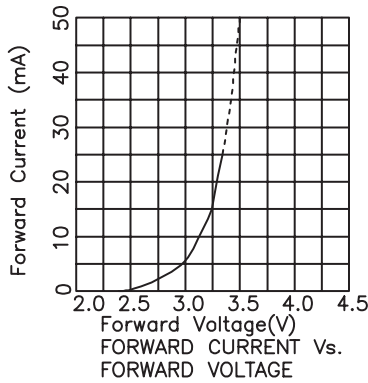
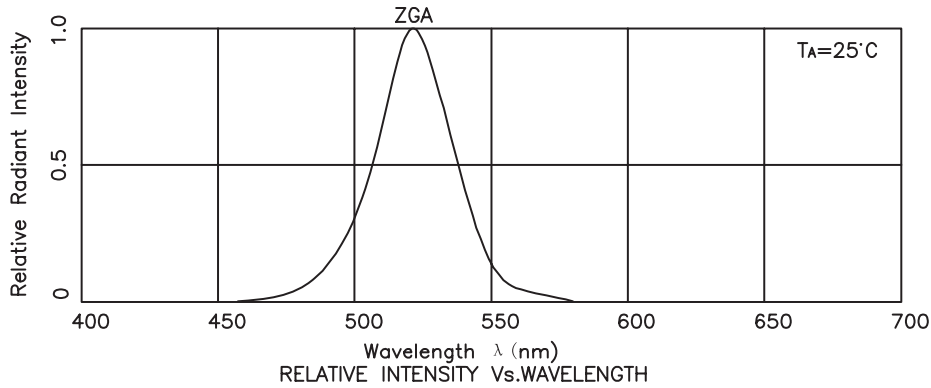
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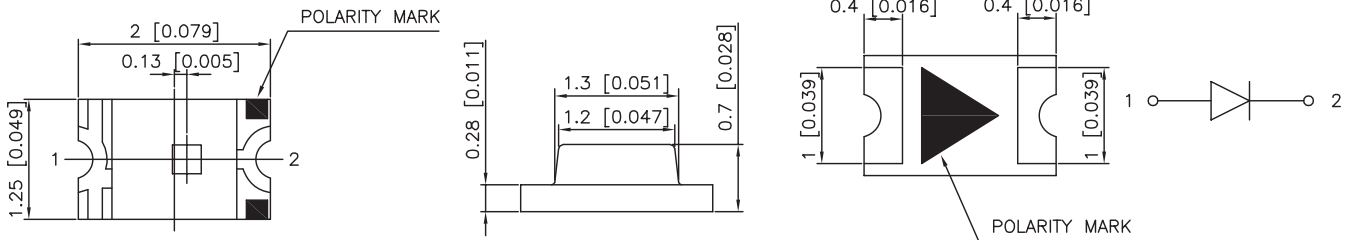
Typical Electrical/Optical Characteristics Curves



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Diagram

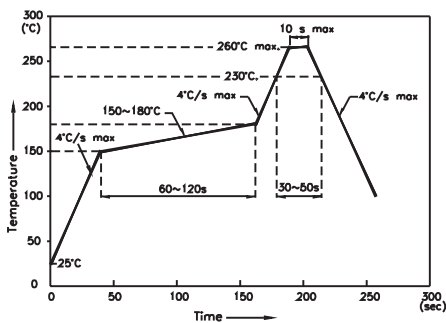


Notes:

1. All dimensions are in millimeters.
2. Tolerance is ± 0.15 unless otherwise noted.
3. Specifications are subject to change without notice.

Soldering Profile

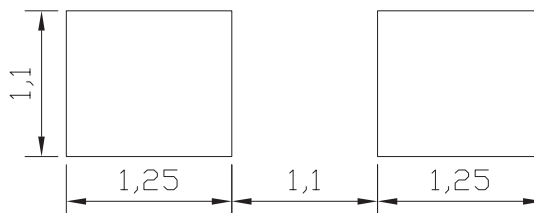
Reflow Soldering Profile For Lead-free SMT Process.



Notes

1. We recommend the reflow temperature 245°C. ($\pm 5^\circ\text{C}$) The maximum soldering temperature should be limited to 260°C.
2. Don't cause stress to epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.

Recommended Soldering Pattern



Part Number Table

| Description | Part Number |
|--|-------------|
| SMD Chip LED, 0805, Green, 1800mcd, 120° | MP005923 |

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