

AA3020MGC

MEGA GREEN

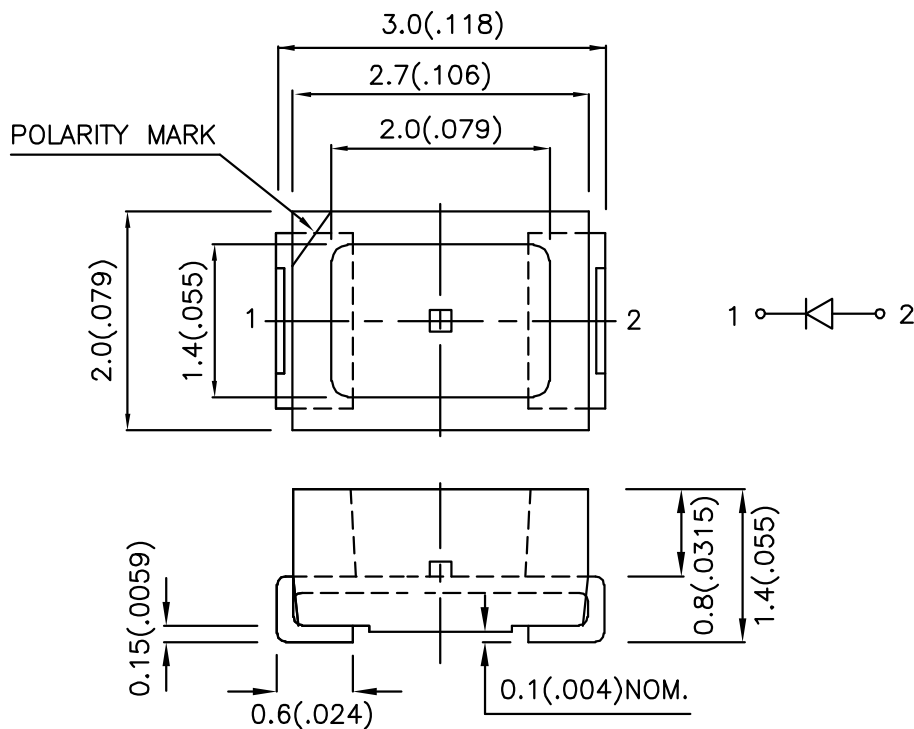
Features

- 3.0MM X 2.0MM, 1.4MM HIGH, ONLY MINIMUM SPACE REQUIRED.
- SUITABLE FOR COMPACT OPTOELECTRONIC APPLICATIONS.
- LOW POWER CONSUMPTION.
- PACKAGE : 2000PCS / REEL.
- RoHS COMPLIANT.

Description

The Mega Green source color devices are made with DH InGaAlP on GaAs substrate Light Emitting Diode.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.25 (0.01") unless otherwise noted.
3. Specifications are subject to change without notice.

Selection Guide

| Part No. | Dice | Lens Type | Iv (mcd) @ 20mA | | Viewing Angle |
|-----------|----------------------|-------------|--------------------|------|------------------|
| | | | Min. | Typ. | θ1/2 |
| AA3020MGC | MEGA GREEN (InGaAlP) | WATER CLEAR | 36 | 80 | 90° |

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

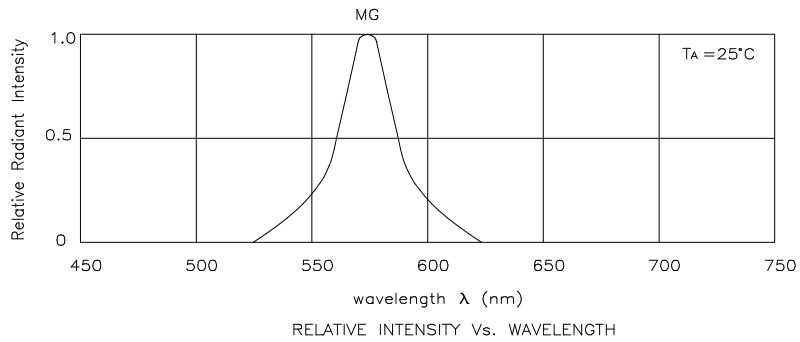
| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|-------------------|--------------------------|------------|------|------|-------|---------------------------|
| λ _{peak} | Peak Wavelength | Mega Green | 574 | | nm | I _F =20mA |
| λ _D | Dominant Wavelength | Mega Green | 568 | | nm | I _F =20mA |
| Δλ _{1/2} | Spectral Line Half-width | Mega Green | 26 | | nm | I _F =20mA |
| C | Capacitance | Mega Green | 20 | | pF | V _F =0V;f=1MHz |
| V _F | Forward Voltage | Mega Green | 2.1 | 2.5 | V | I _F =20mA |
| I _R | Reverse Current | Mega Green | | 10 | uA | V _R = 5V |

Absolute Maximum Ratings at TA=25°C

| Parameter | Mega Green | Units |
|-------------------------------|----------------|-------|
| Power dissipation | 105 | mW |
| DC Forward Current | 30 | mA |
| Peak Forward Current [1] | 150 | mA |
| Reverse Voltage | 5 | V |
| Operating/Storage Temperature | -40°C To +85°C | |

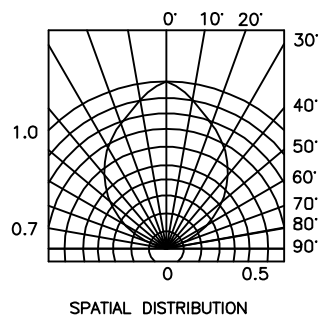
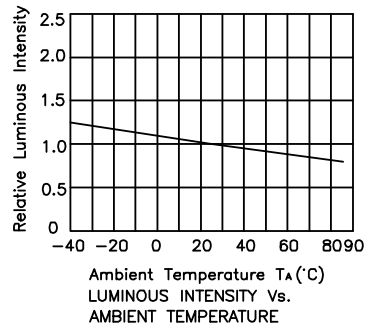
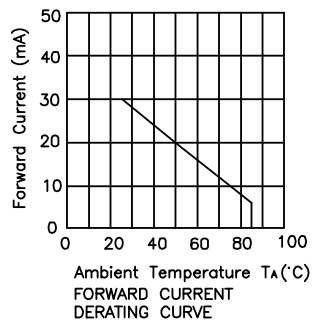
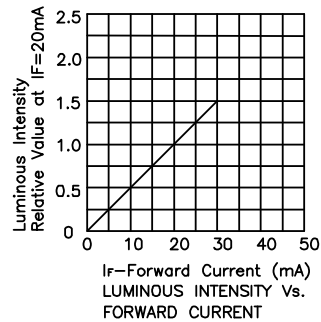
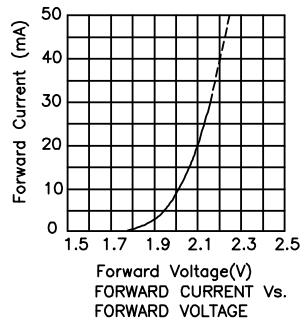
Note:

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



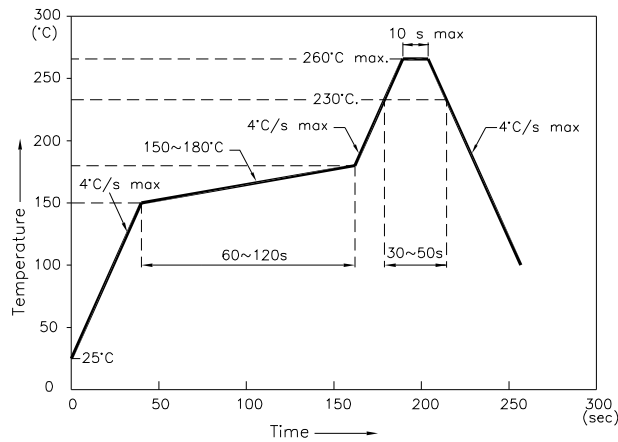
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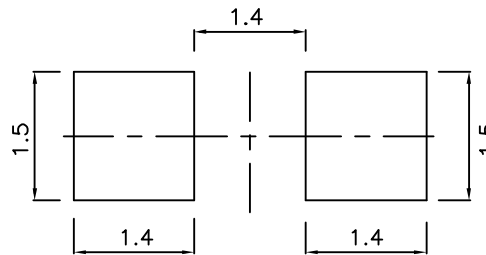
Reflow Soldering Profile For Lead-free SMT Process.



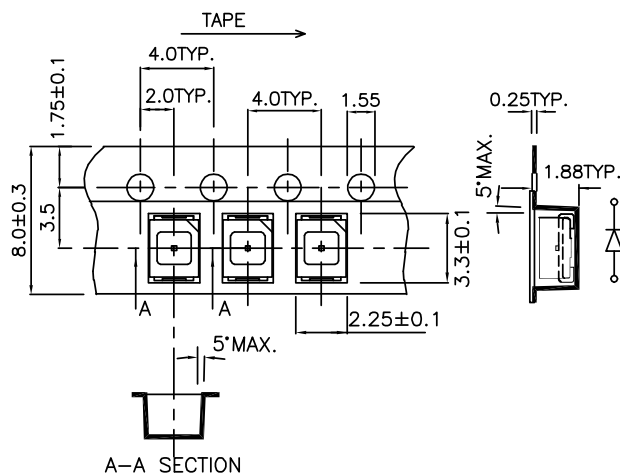
NOTES:

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 there is sorting requirement (eg. forward voltage, luminous intensity or wavelength), the condition as follows:

1. Wavelength: +/-1nm (Test condition is based on the sorting standard).
2. Luminous intensity: +/-15% (Test condition is based on the sorting standard).
3. Forward voltage: +/-0.1V (Test condition is based on the sorting standard).