

PRELIMINARY SPEC

Part Number: APEKA4030MGC

Mega Green

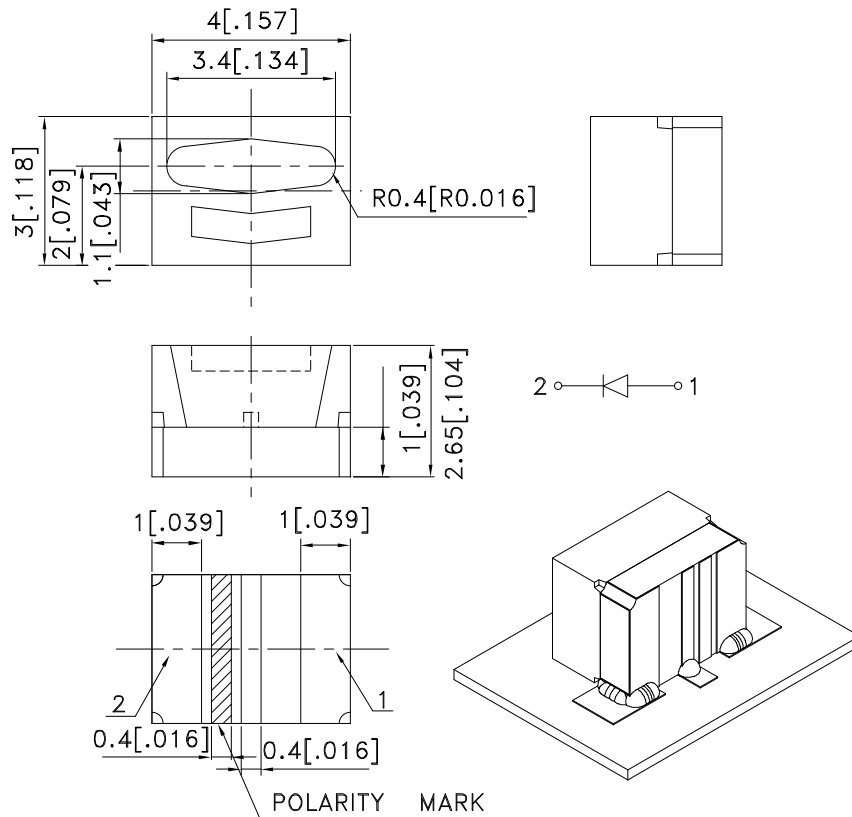
Features

- 4.0mmx3.0mm right angle SMT LED, 2.65mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Package :500pcs / reel.
- Moisture sensitivity level : level 4.
- RoHS compliant.

Description

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

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.2 (0.008") unless otherwise noted.
3. Specifications are subject to change without notice.
4. The device has a single mounting surface. The device must be mounted according to the specifications.



Selection Guide

| Part No. | Dice | Lens Type | Iv (mcd) [2] @ 20mA | | Viewing Angle [1] |
|--------------|----------------------|-------------|------------------------|------|----------------------|
| | | | Min. | Typ. | 2θ1/2 |
| APEKA4030MGC | Mega Green (AlGaInP) | WATER CLEAR | 50 | 100 | 90° |

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. Luminous intensity/ luminous Flux: +/-15%.

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 [1] | Dominant Wavelength | Mega Green | 570 | | 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 [2] | Forward Voltage | Mega Green | 2.1 | 2.5 | V | I _F =20mA |
| I _R | Reverse Current | Mega Green | | 10 | uA | V _R =5V |

Notes:

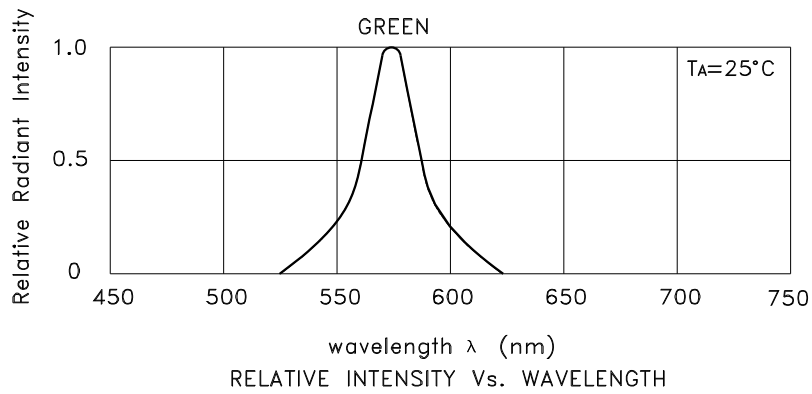
- 1.Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

| Parameter | Mega Green | Units |
|--------------------------|----------------|-------|
| Power dissipation | 75 | mW |
| DC Forward Current | 30 | mA |
| Peak Forward Current [1] | 150 | mA |
| Reverse Voltage | 5 | V |
| Operating Temperature | -40°C To +85°C | |
| Storage Temperature | -40°C To +85°C | |

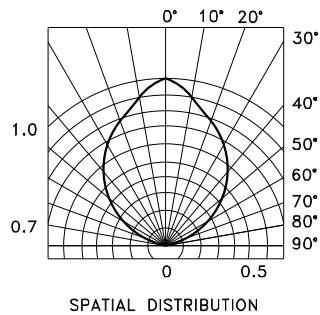
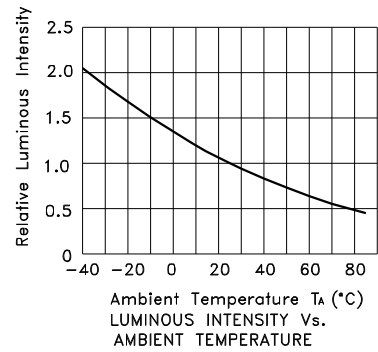
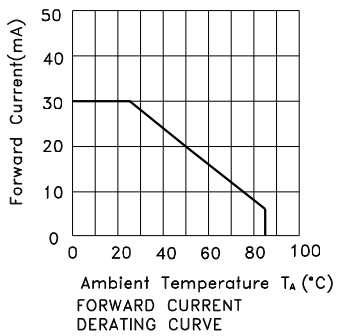
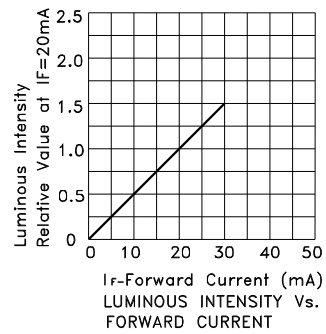
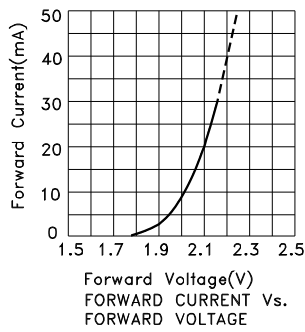
Note:

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



Mega Green

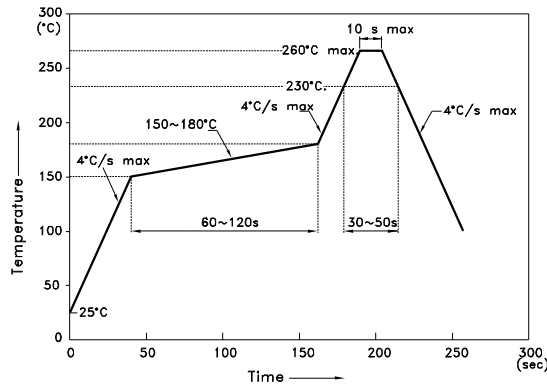
APEKA4030MGC



APEKA4030MGC

Reflow soldering is recommended and the soldering profile is shown below.
Other soldering methods are not recommended as they might cause damage to the product.

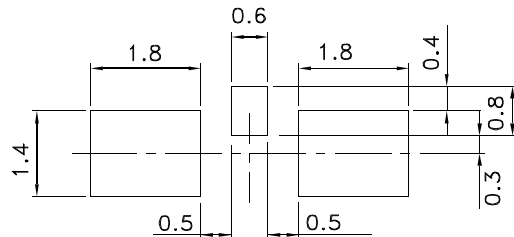
Reflow Soldering Profile For Lead-free SMT Process.



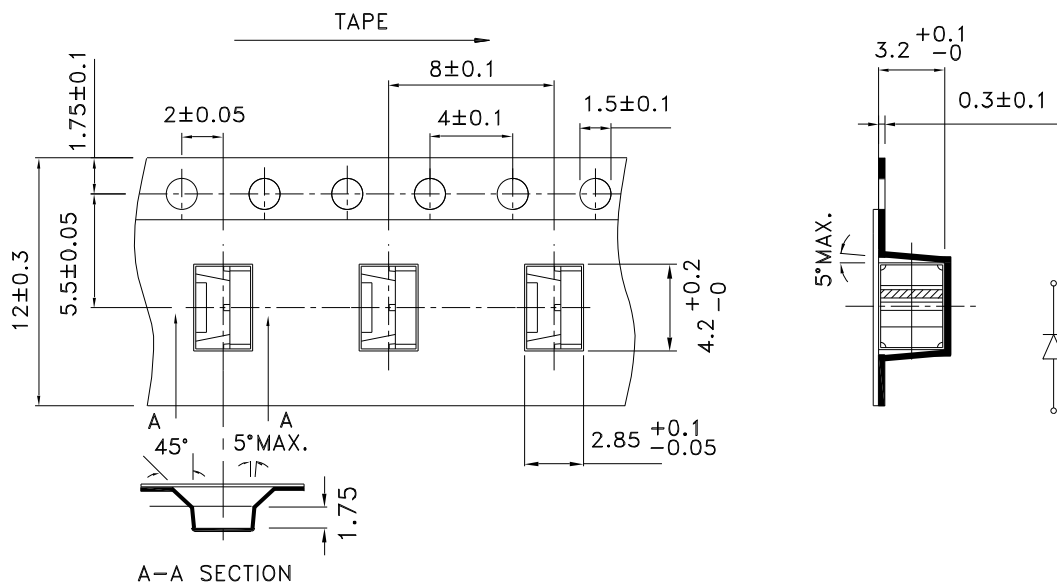
NOTES:

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; Tolerance: ± 0.1)



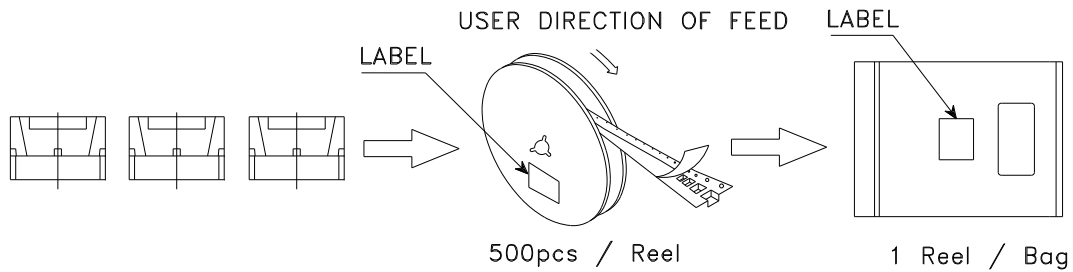
Tape Dimensions (Units : mm)



Kingbright

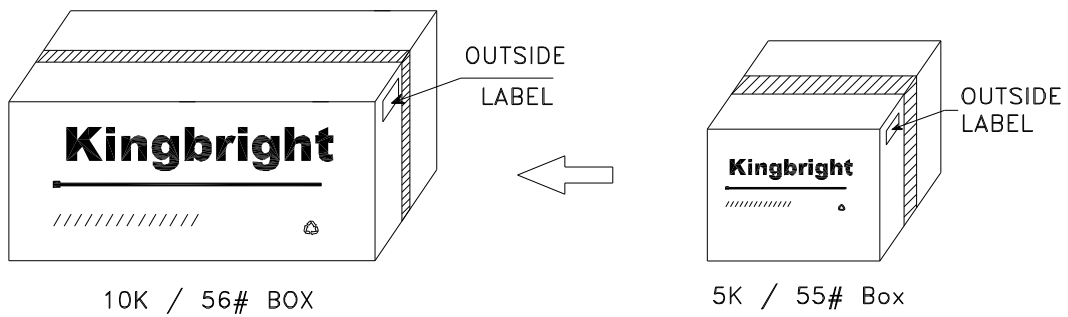
PACKING & LABEL SPECIFICATIONS

APEKA4030MGC



500pcs / Reel

1 Reel / Bag



10K / 56# BOX

5K / 55# Box

| | | | | | |
|----------------------------------|------|---|-----|------------|--------|
| Kingbright | | | | | |
| P/NO: APEKA4030xxx | | | | | |
| QTY: 500 pcs | Q.C. | <table border="1"> <tr> <td>Q C</td> </tr> <tr> <td>xx xx xxxx</td> </tr> <tr> <td>PASSED</td> </tr> </table> | Q C | xx xx xxxx | PASSED |
| Q C | | | | | |
| xx xx xxxx | | | | | |
| PASSED | | | | | |
| S/N: XXXX | | | | | |
| CODE: XXX | | | | | |
| LOT NO: | | | | | |
| | | | | | |
| xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx | | | | | |
| RoHS Compliant | | | | | |