

P/N: KCSA56-102

SUPER BRIGHTGREEN

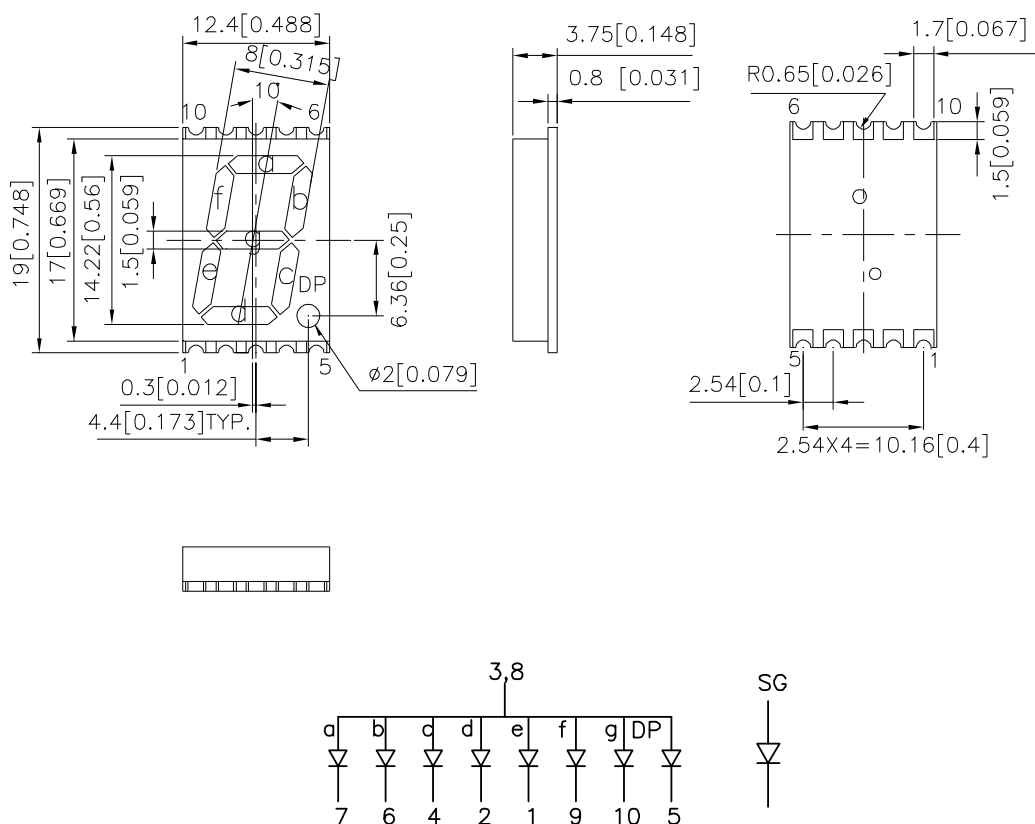
### Features

- 0.56INCH DIGIT HEIGHT.
- LOW CURRENT OPERATION.
- EXCELLENT CHARACTER APPEARANCE.
- I.C. COMPATIBLE.
- MECHANICALLY RUGGED.
- GRAY FACE, WHITE SEGMENT.
- PACKAGE: 400PCS/ REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 4.
- RoHS COMPLIANT.

### Description

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

### Package Dimensions & Internal Circuit Diagram



#### Notes:

1. All dimensions are in millimeters (inches), Tolerance is  $\pm 0.25(0.01)$  unless otherwise noted.
2. Specifications are subject to change without notice.
3. The gap between the reflector and PCB shall not exceed 0.25mm.

## Selection Guide

| Part No.   | Dice                     | Lens Type      | Iv (ucd) [1]<br>@ 10mA |       | Description                        |
|------------|--------------------------|----------------|------------------------|-------|------------------------------------|
|            |                          |                | Min.                   | Typ.  |                                    |
| KCSA56-102 | SUPER BRIGHT GREEN (GaP) | WHITE DIFFUSED | 3000                   | 13200 | Common Anode, Rt.<br>Hand Decimal. |

Note:

1. Luminous intensity/ luminous Flux: +/-15%.

## Electrical / Optical Characteristics at TA=25°C

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

Notes:

1.Wavelength: +/-1nm.

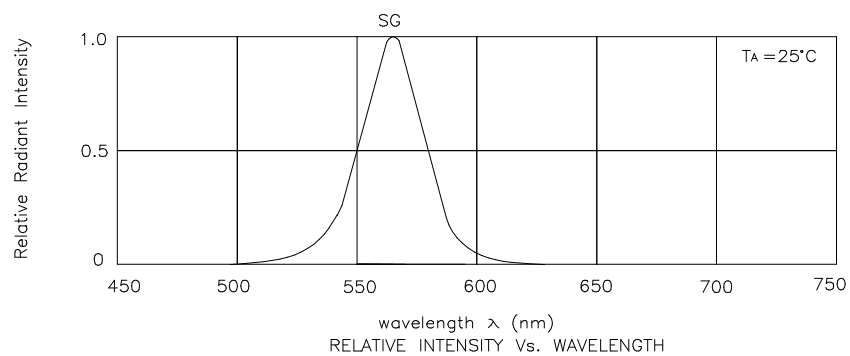
2. Forward Voltage: +/-0.1V.

## Absolute Maximum Ratings at TA=25°C

| Parameter                       | Super Bright Green | Units |
|---------------------------------|--------------------|-------|
| Power dissipation               | 62.5               | mW    |
| DC Forward Current              | 25                 | mA    |
| Peak Forward Current [1]        | 140                | mA    |
| Reverse Voltage                 | 5                  | V     |
| Operating / Storage Temperature | -40°C To +85°C     |       |

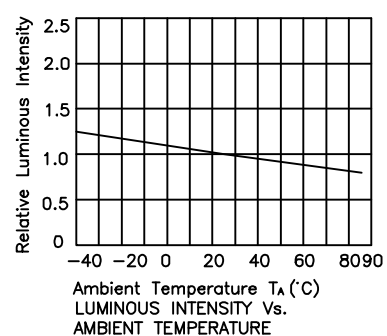
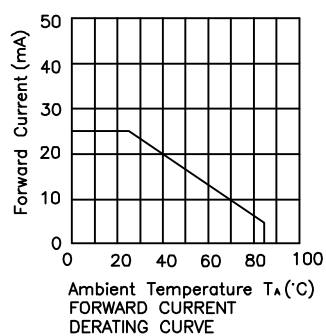
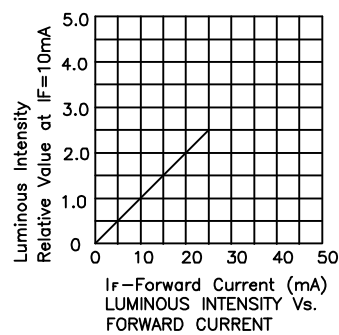
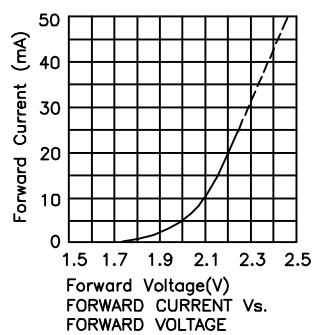
Note:

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



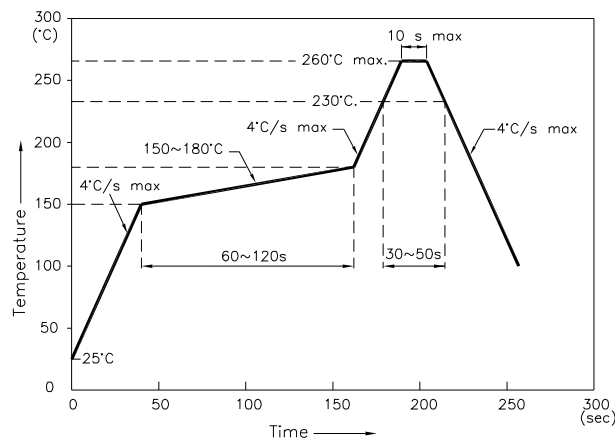
## Super Bright Green

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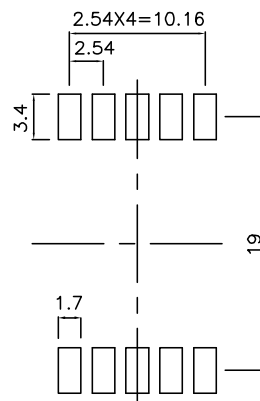
Reflow Soldering Profile For Lead-free SMT Process.



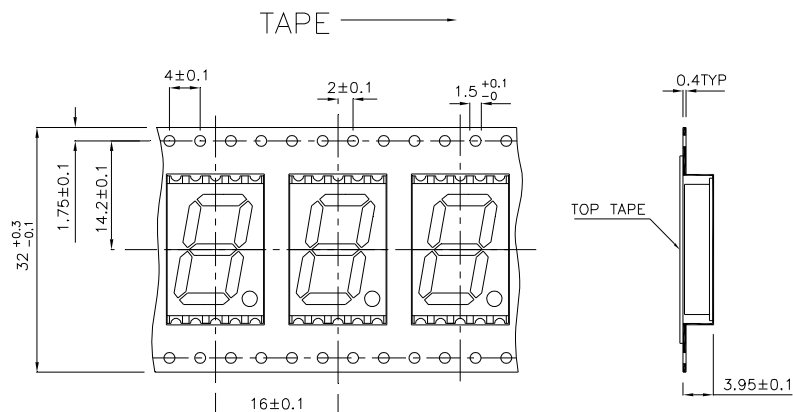
### NOTES:

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)



Note: Tolerance is ±0.25 unless otherwise noted.