



## Selection Guide

| Part No.    | Emitting Color (Material) | Lens Type      | Iv (ucd) [1]<br>@ 10mA |       | Description                         |
|-------------|---------------------------|----------------|------------------------|-------|-------------------------------------|
|             |                           |                | Min.                   | Typ.  |                                     |
| KCPDC04-123 | Green (AlGaInP)           | White Diffused | 5600                   | 11000 | Common Cathode,<br>Rt. Hand Decimal |
|             |                           |                | *1400                  | *3100 |                                     |

### Notes:

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

\* Luminous intensity value is traceable to CIE127-2007 standards.

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

| Symbol                | Parameter                | Emitting Color | Typ. | Max. | Units | Test Conditions           |
|-----------------------|--------------------------|----------------|------|------|-------|---------------------------|
| $\lambda_{peak}$      | Peak Wavelength          | Green          | 574  |      | nm    | I <sub>F</sub> =10mA      |
| $\lambda_D$ [1]       | Dominant Wavelength      | Green          | 570  |      | nm    | I <sub>F</sub> =10mA      |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | Green          | 20   |      | nm    | I <sub>F</sub> =10mA      |
| C                     | Capacitance              | Green          | 15   |      | pF    | V <sub>F</sub> =0V;f=1MHz |
| V <sub>F</sub> [2]    | Forward Voltage          | Green          | 2.0  | 2.5  | V     | I <sub>F</sub> =10mA      |
| I <sub>R</sub>        | Reverse Current          | Green          |      | 10   | uA    | V <sub>R</sub> =5V        |

### Notes:

1. Wavelength: +/-1nm.

2. Forward Voltage: +/-0.1V.

3. Wavelength value is traceable to CIE127-2007 standards.

4. Excess driving current and / or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

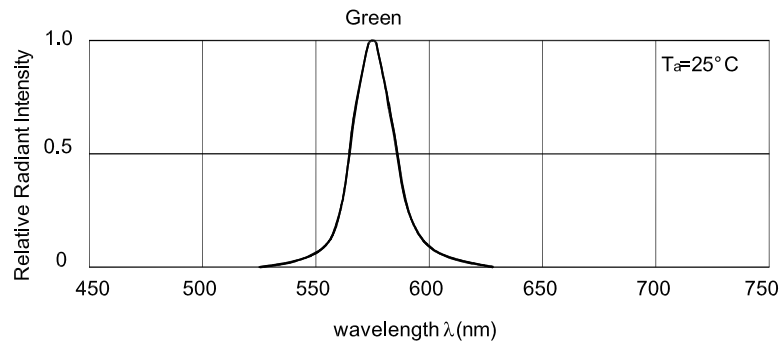
## Absolute Maximum Ratings at TA=25°C

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

### Notes:

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

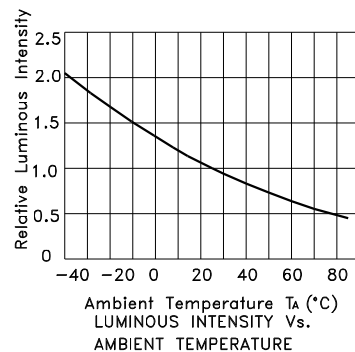
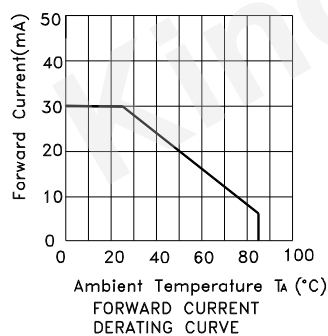
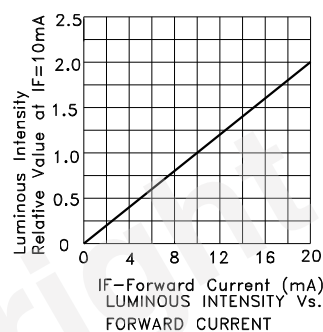
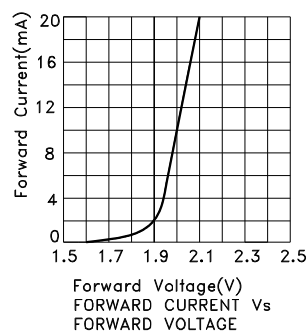
2. Relative humidity levels maintained between 40% and 60% in production area are recommended to avoid the build-up of static electricity – Ref JEDEC/JESD625-A and JEDEC/J-STD-033.



Relative Intensity Vs. Wavelength

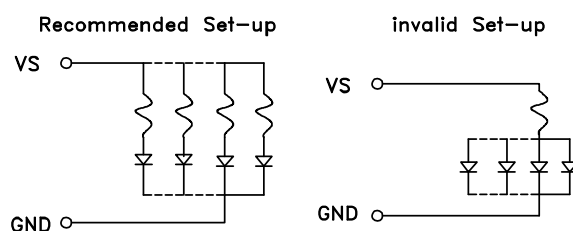
## Green

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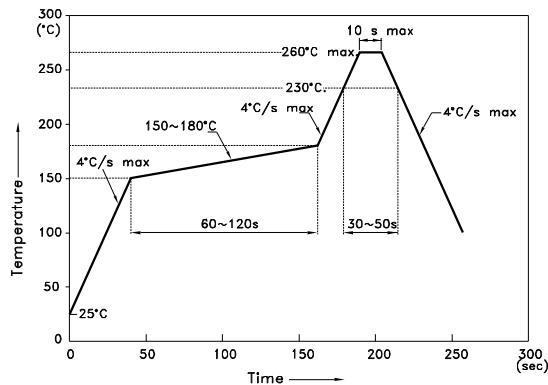
## CIRCUIT DESIGN NOTES

1. Protective current-limiting resistors may be necessary to operate the Displays.
2. LEDs mounted in parallel should each be placed in series with its own current-limiting resistor.



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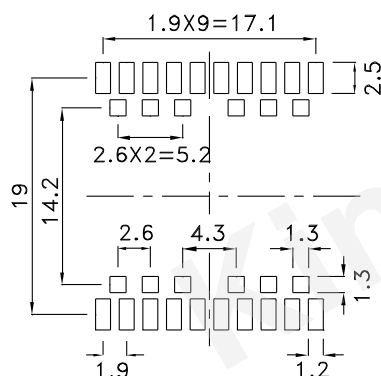
Reflow Soldering Profile For Lead-free SMT Process.



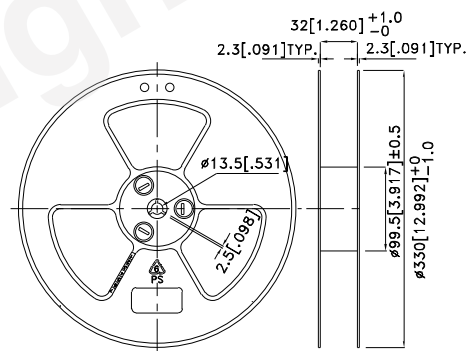
### NOTES:

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.

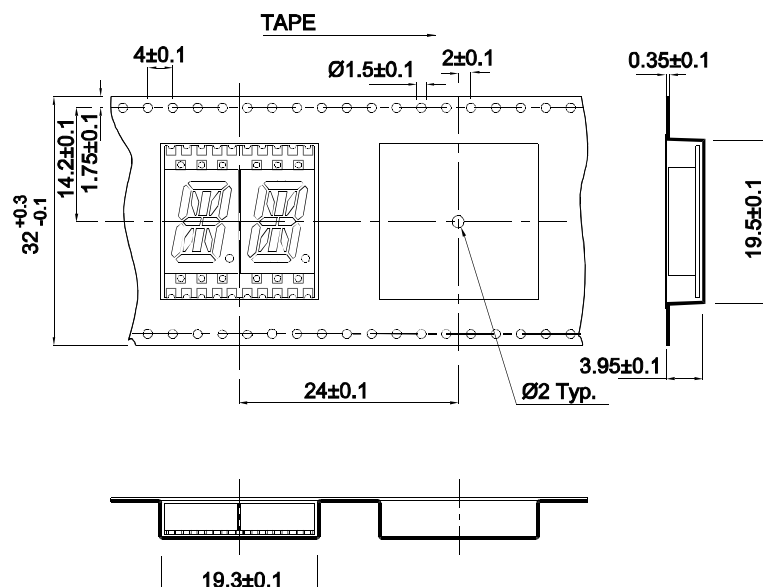
### Recommended Soldering Pattern (Units : mm; Tolerance: $\pm 0.15$ )



### Reel Dimension

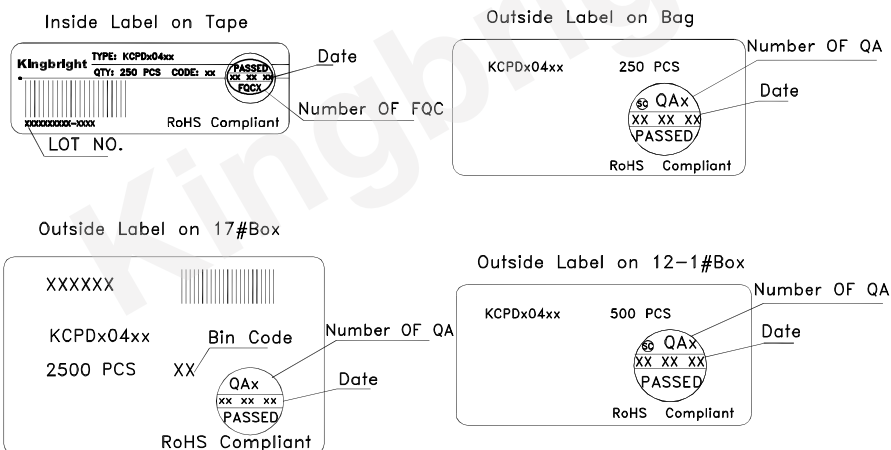
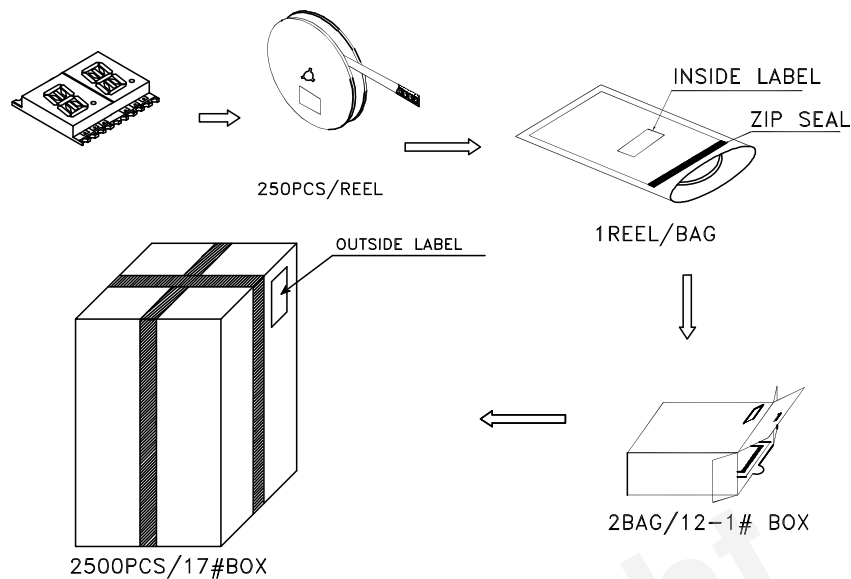


### Tape Specifications (Units : mm)



## PACKING & LABEL SPECIFICATIONS

## KCPDC04-123



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