

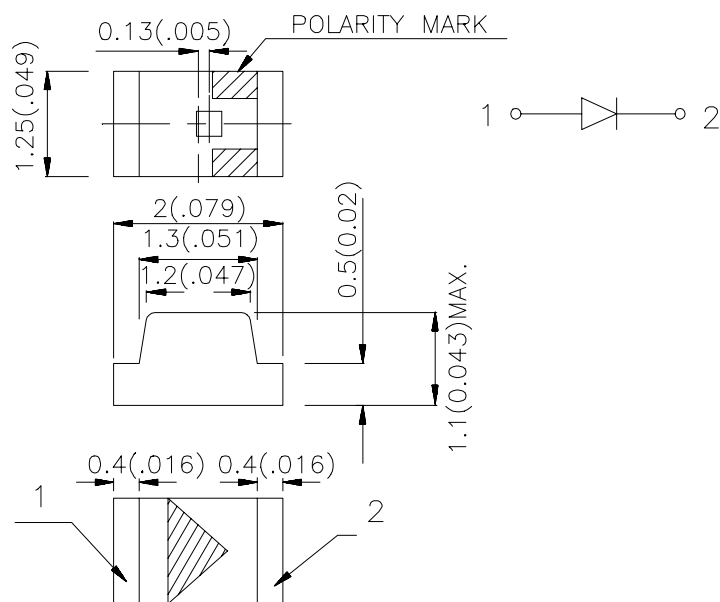
### Features

- 2.0mmx1.25mm SMT LED, 1.1mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.

### Description

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

### Package Dimensions



#### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.1 (0.004)$  unless otherwise noted.
3. Specifications are subject to change without notice.

## Selection Guide

| Part No.    | Dice            | Lens Type   | Iv (mcd)<br>@ 20 mA |      | Viewing<br>Angle |
|-------------|-----------------|-------------|---------------------|------|------------------|
|             |                 |             | Min.                | Typ. | θ1/2             |
| KP-2012CGCK | GREEN (InGaAlP) | WATER CLEAR | 15                  | 40   | 120°             |

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 T<sub>A</sub>=25°C

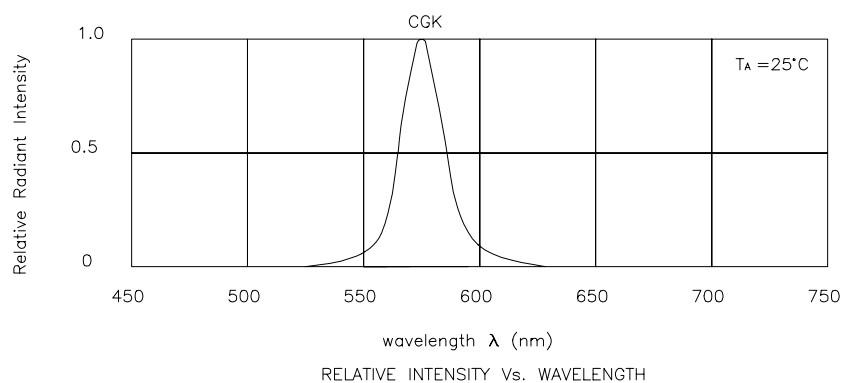
| Symbol            | Parameter                | Device | Typ. | Max. | Units | Test Conditions           |
|-------------------|--------------------------|--------|------|------|-------|---------------------------|
| λ <sub>peak</sub> | Peak Wavelength          | Green  | 574  |      | nm    | I <sub>F</sub> =20mA      |
| λ <sub>D</sub>    | Dominate Wavelength      | Green  | 570  |      | nm    | I <sub>F</sub> =20mA      |
| Δλ <sub>1/2</sub> | Spectral Line Half-width | Green  | 20   |      | nm    | I <sub>F</sub> =20mA      |
| C                 | Capacitance              | Green  | 15   |      | pF    | V <sub>F</sub> =0V;f=1MHz |
| V <sub>F</sub>    | Forward Voltage          | Green  | 2.1  | 2.5  | V     | I <sub>F</sub> =20mA      |
| I <sub>R</sub>    | Reverse Current          | Green  |      | 10   | uA    | V <sub>R</sub> = 5V       |

## Absolute Maximum Ratings at T<sub>A</sub>=25°C

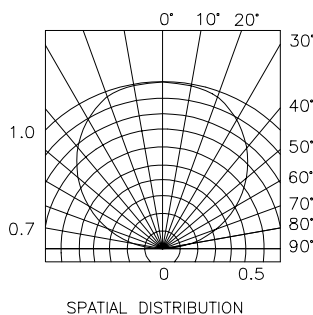
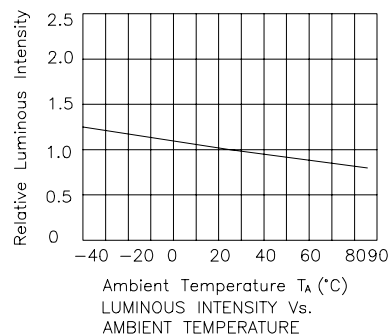
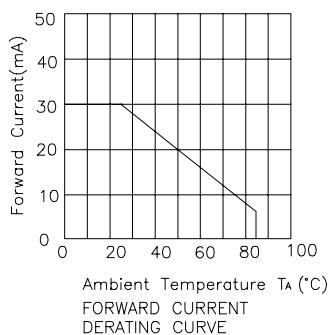
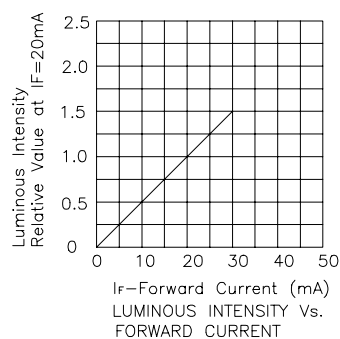
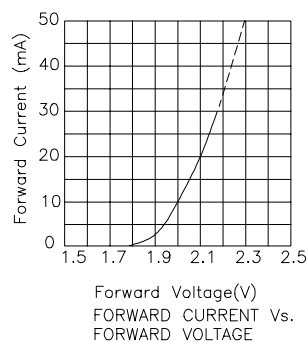
| Parameter                     | Green          | Units |
|-------------------------------|----------------|-------|
| Power dissipation             | 105            | mW    |
| DC Forward Current            | 30             | mA    |
| Peak Forward Current [1]      | 150            | mA    |
| Reverse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

Note:

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



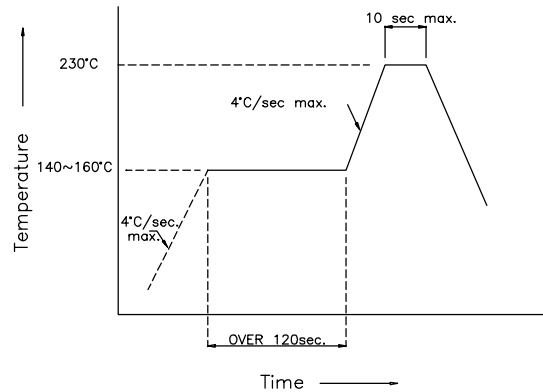
## Green KP-2012CGCK



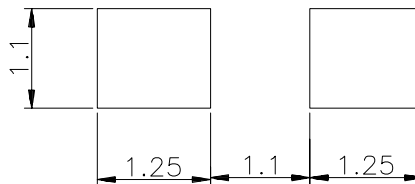
## KP-2012CGCK

### SMT Reflow Soldering Instructions

Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and second soldering process.



### Recommended Soldering Pattern (Units : mm)



### Tape Specifications (Units : mm)

