

APK3520VGC GREEN

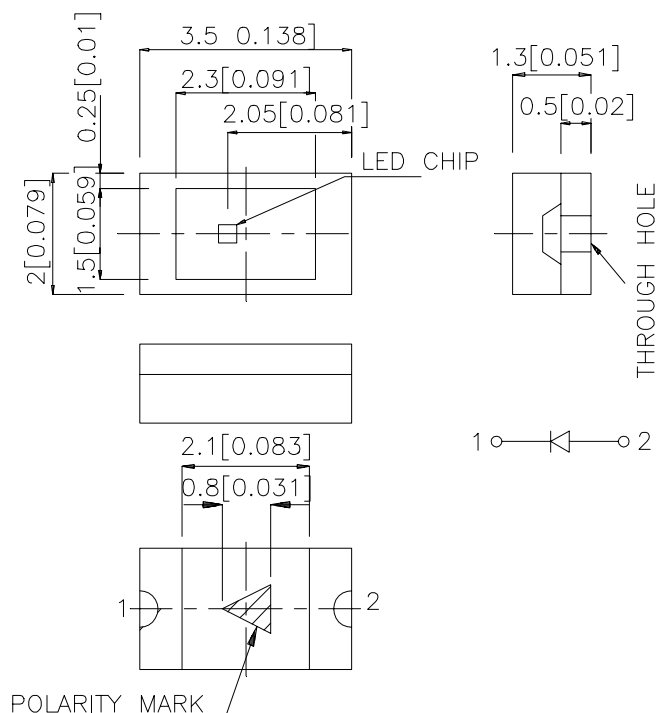
### Features

- 3.5mmX2.0mm SMT LED, 1.3mm 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 InGaN on SiC Light Emitting Diode.

### Package Dimensions



### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2$  (0.0079") 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. | 2θ1/2            |
| APK3520VGC | GREEN (InGaN) | WATER CLEAR | 70                  | 120  | 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

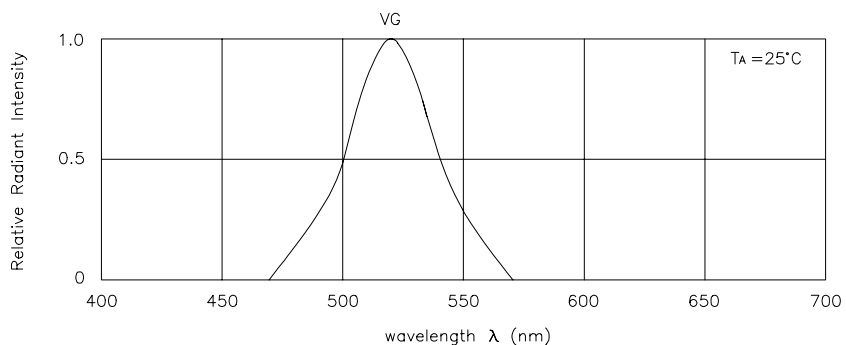
| Symbol            | Parameter                | Device | Typ. | Max. | Units | Test Conditions           |
|-------------------|--------------------------|--------|------|------|-------|---------------------------|
| λ <sub>peak</sub> | Peak Wavelength          | Green  | 520  |      | nm    | I <sub>F</sub> =20mA      |
| λ <sub>D</sub>    | Dominate Wavelength      | Green  | 525  |      | nm    | I <sub>F</sub> =20mA      |
| Δλ <sub>1/2</sub> | Spectral Line Half-width | Green  | 38   |      | nm    | I <sub>F</sub> =20mA      |
| C                 | Capacitance              | Green  | 45   |      | pF    | V <sub>F</sub> =0V;f=1MHz |
| V <sub>F</sub>    | Forward Voltage          | Green  | 4.0  | 4.5  | 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 |       |

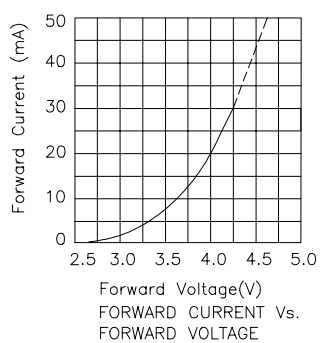
Note:

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

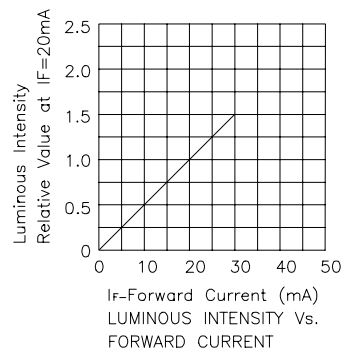


RELATIVE INTENSITY Vs. WAVELENGTH

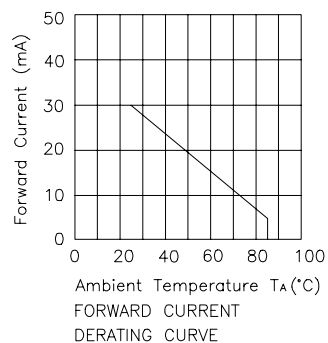
## Green APK3520VGC



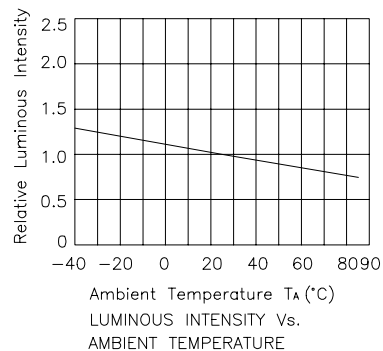
FORWARD CURRENT Vs. FORWARD VOLTAGE



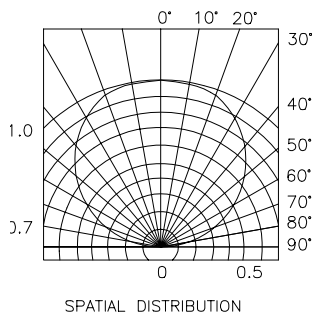
LUMINOUS INTENSITY Vs. FORWARD CURRENT



FORWARD CURRENT DERATING CURVE



LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE

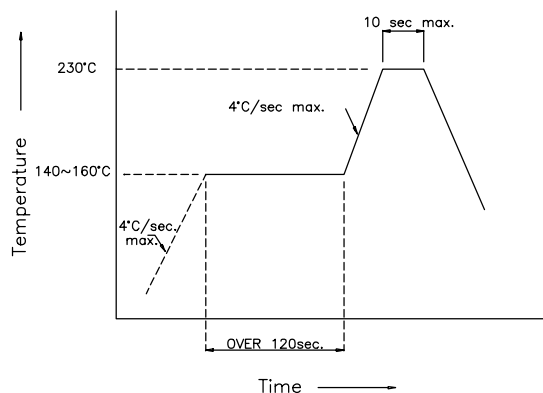


SPATIAL DISTRIBUTION

## APK3520VGC

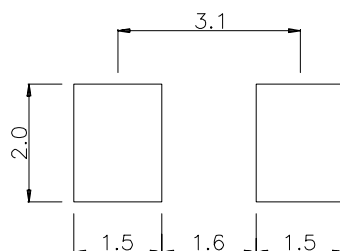
### SMT Reflow Soldering Instructions

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)

