Kingbright

ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

KA-3528VGC   GREEN

Features

- SINGLE COLOR.

- SUITABLE FOR ALL SMT ASSEMBLY AND SOLDER
  PROCESS.

- AVAILABLE ON TAPE AND REEL.

- IDEAL FOR BACKLIGHTING.

- PACKAGE : 1500PCS / REEL.
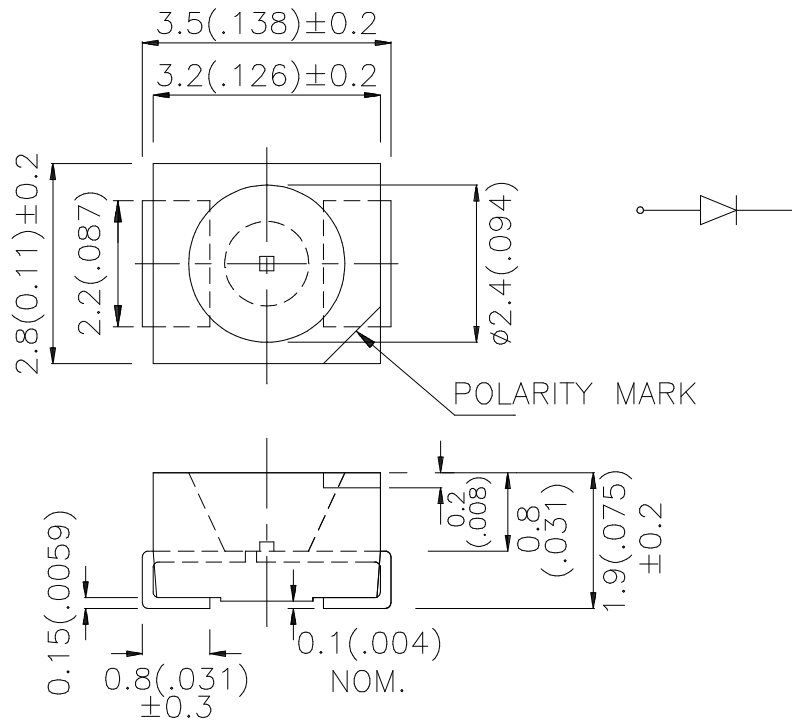
- RoHS COMPLIANT.

Description

The Green source color devices are made with InGaN on SiC Light Emitting Diode.
Static electricity and surge damage the LEDS.
It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.
All devices, equipment and machinery must be electrically grounded.

Package Dimensions

Notes:
1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25(0.01") unless otherwise noted.
3. Specifications are subject to change without notice.

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Selection Guide

| Part No. | Dice | Lens Type | Iv (mcd) @ 20mA | | Viewing Angle |
			Min.	Typ.	2θ1/2
KA-3528VGC	GREEN (InGaN)	WATER CLEAR	110	220	120°

Note:
1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

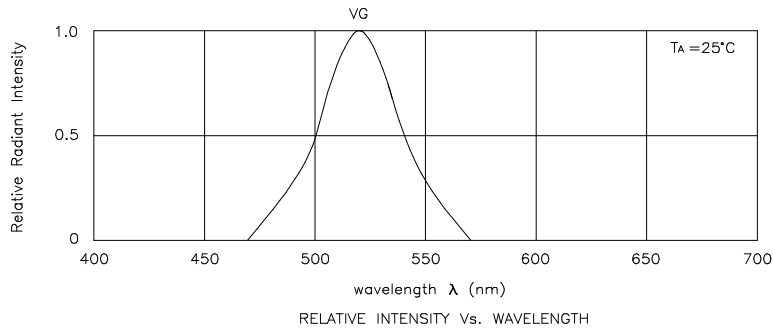## Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Green	520		nm	I_F=20mA
λD	Dominant Wavelength	Green	525		nm	I_F=20mA
Δλ1/2	Spectral Line Half-width	Green	38		nm	I_F=20mA
C	Capacitance	Green	45		pF	V_F=0V;f=1MHz
V_F	Forward Voltage	Green	3.5	4.5	V	I_F=20mA
I_R	Reverse Current	Green		10	uA	V_R = 5V

Absolute Maximum Ratings at T_A=25°C

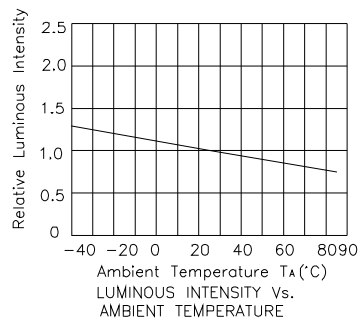| Parameter	Green	Units
Power dissipation	135	mW
DC Forward Current	30	mA
Peak Forward Current [1]	150	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

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

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RELATIVE INTENSITY Vs. WAVELENGTH

Green   **KA-3528VGC**

FORWARD CURRENT Vs.
FORWARD VOLTAGE

LUMINOUS INTENSITY Vs.
FORWARD CURRENT

FORWARD CURRENT
DERATING CURVE

LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE

SPATIAL DISTRIBUTION

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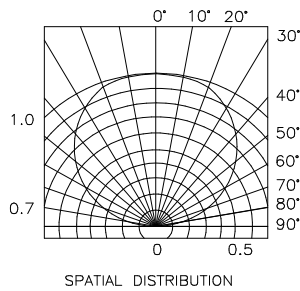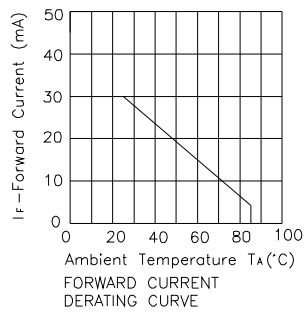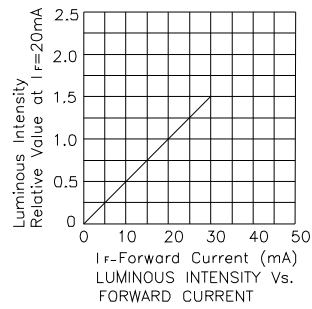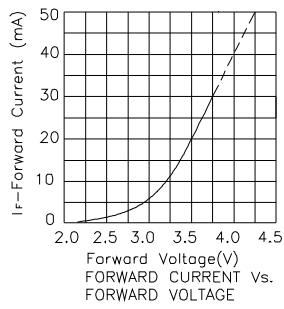
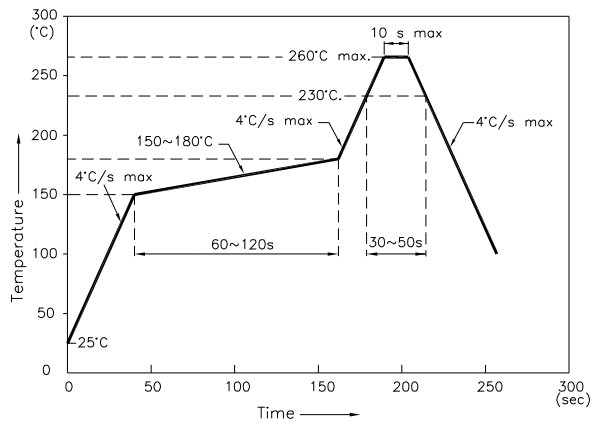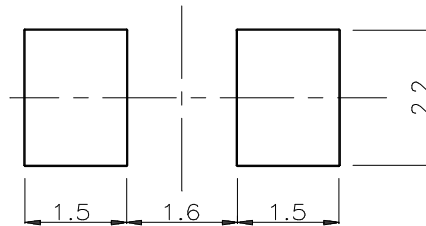**KA-3528VGC**

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)
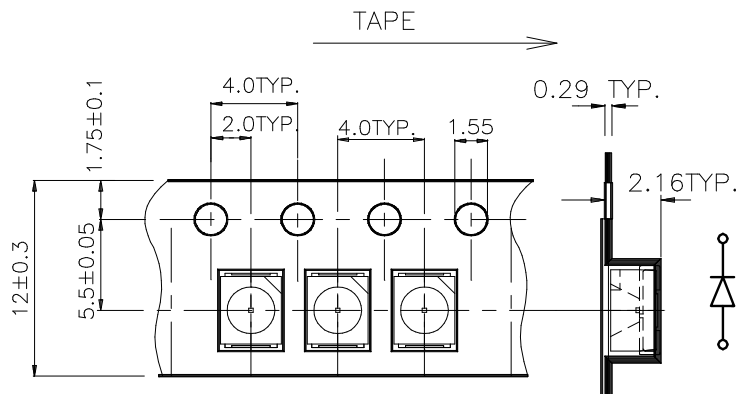
Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity/ luminous flux or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm

2. Luminous Intensity/ luminous flux: +/-15%

3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.