



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

P/N: KPK-3020VGC

GREEN

Features

- 3.0mmX2.0mm 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.
- RoHS COMPLIANT.

Description

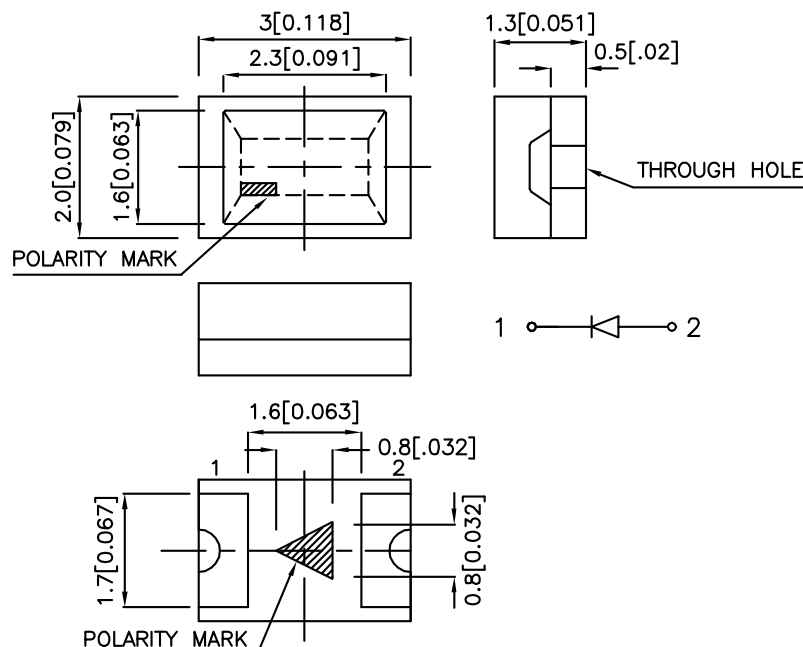
The Green source color devices are made with InGaN on SiC Light Emitting Diode.

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 ± 0.2 (0.008") unless otherwise noted.
3. Specifications are subject to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	2θ1/2
KPK-3020VGC	GREEN (InGaN)	WATER CLEAR	70	150	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 TA=25°C

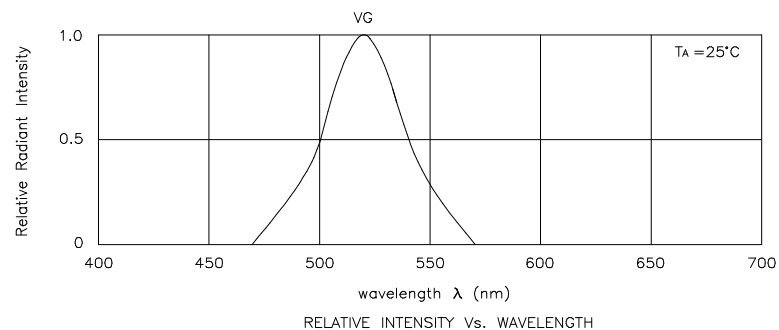
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Green	520		nm	IF=20mA
λD	Dominant Wavelength	Green	525		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Green	38		nm	IF=20mA
C	Capacitance	Green	45		pF	VF=0V;f=1MHz
VF	Forward Voltage	Green	3.5	4.5	V	IF=20mA
IR	Reverse Current	Green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

Absolute Maximum Ratings at TA=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	

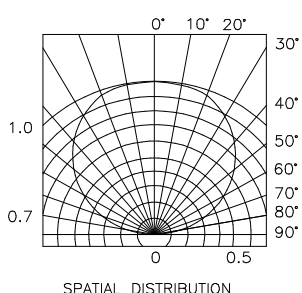
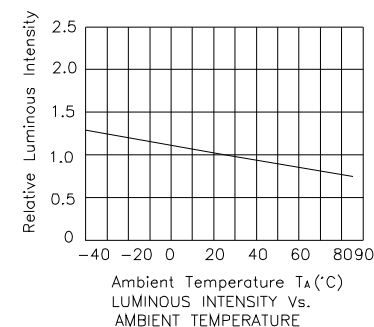
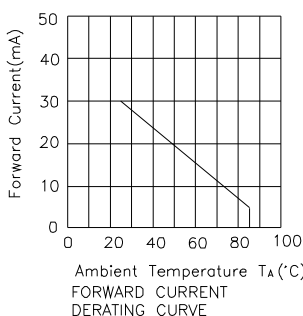
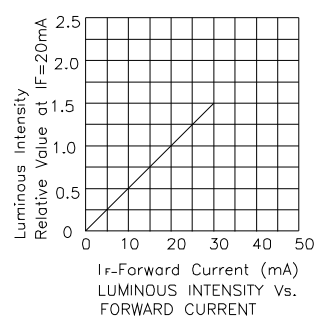
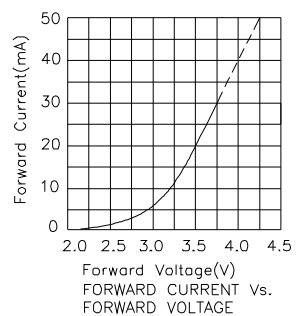
Note:

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



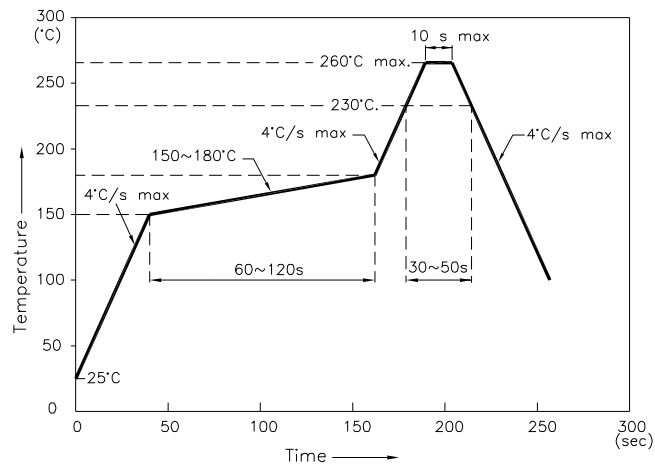
Green

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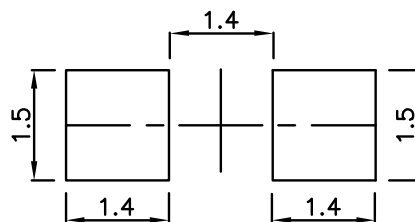
Reflow Soldering Profile For Lead-free SMT Process.



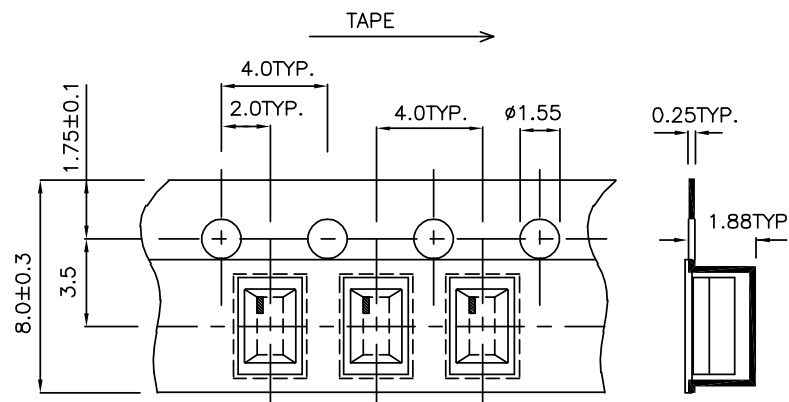
NOTES:

1. We recommend the reflow temperature $245^{\circ}\text{C} (+/-5^{\circ}\text{C})$. 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: $\pm 1\text{nm}$
2. Luminous intensity/ luminous flux: $\pm 15\%$
3. Forward Voltage: $\pm 0.1\text{V}$

Note: Accuracy may depend on the sorting parameters.