

#### SUBMINIATURE SOLID STATE LAMP

KM2520SGC03

SUPER BRIGHT GREEN

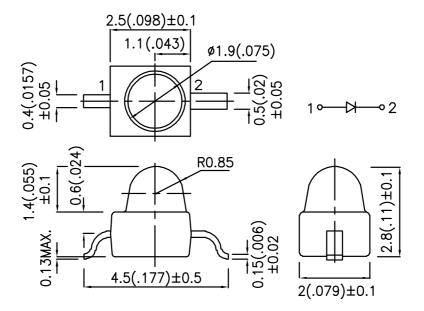
#### **Features**

- •SUBMINIA TURE PACKAGE.
- •WIDE VIEWING ANGLE.
- •GULL WING LEAD.
- •LONG LIFE SOLID STATE RELIABILITY.
- •LOW PACKAGE PROFILE.
- •PACKAGE: 1000PCS/REEL.
- •RoHS COMPLIANT.

#### **Description**

The Super Bright Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

#### **Package Dimensions**



- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.
- Lead spacing is measured where the leads emerge from the package.
   Specifications are subject to change without notice.

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DRAWN: B.H.LI

APPROVED: J. Lu CHECKED: Allen Liu

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#### **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) @ 20mA		Viewing Angle
			Min.	Тур.	2 θ 1/2
KM2520SGC03	SUPER BRIGHT GREEN (GaP)	WATER CLEAR	36	80	20°

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

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Green	565		nm	IF=20mA
λD	Dominant Wavelength	Super Bright Green	568		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Super Bright Green	30		nm	IF=20mA
С	Capacitance	Super Bright Green	15		pF	VF=0V;f=1MHz
VF	Forward Voltage	Super Bright Green	2.2	2.5	V	IF=20mA
lr	Reverse Current	Super Bright Green		10	uA	VR = 5V

#### Absolute Maximum Ratings at Ta=25°C

Parameter	Super Bright Green	Units
Power dissipation	105	mW
DC Forward Current	25	mA
Peak Forward Current [1]	140	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

Note:

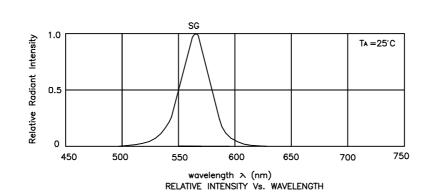
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Note: 1.  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

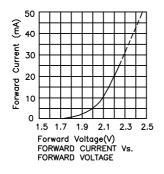
<sup>1. 1/10</sup> Duty Cycle, 0.1ms Pulse Width.

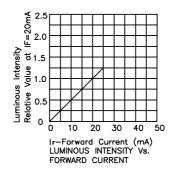
# **Kingbright**

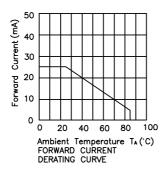


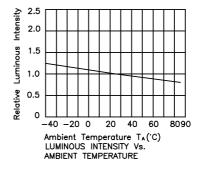
Super Bright Green

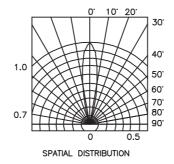
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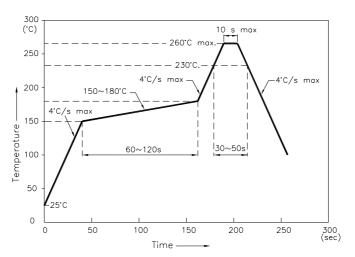
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### KM2520SGC03

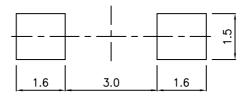
Reflow Soldering Profile For Lead-free SMT Process.



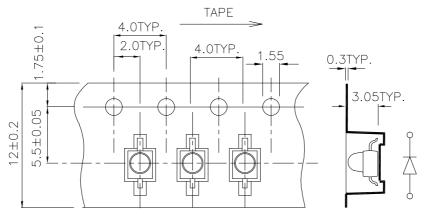
#### NOTES:

- 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, or wavelength), the typical accuracy of the sorting process is as follows:

- 1. Wavelength: +/-1nm
- 2. Luminous Intensity: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

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