

SUBMINIATURE SOLID STATE LAMP

KM2520SYC03

SUPER BRIGHT YELLOW

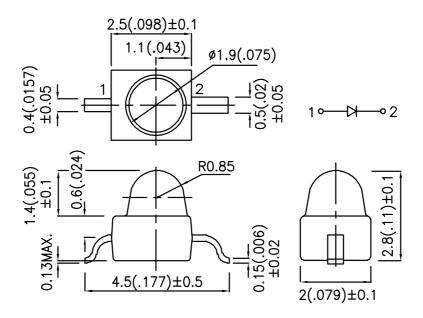
Features

- •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 Yellow device is made with DH InGaAIP (on GaAs substrate) light emitting diode chip.

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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Selection Guide

Part No.	Dice	Lens Type	lv (mcd) @ 20mA		Viewing Angle
			Min.	Тур.	2 θ 1/2
KM2520SYC03	SUPER BRIGHT YELLOW (InGaAIP)	WATER CLEAR	110	700	20°

Electrical / Optical Characteristics at Ta=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Yellow	590		nm	IF=20mA
λD	Dominant Wavelength	Super Bright Yellow	588		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Super Bright Yellow	28		nm	IF=20mA
O	Capacitance	Super Bright Yellow	25		pF	VF=0V;f=1MHz
VF	Forward Voltage	Super Bright Yellow	2.0	2.5	V	IF=20mA
lr	Reverse Current	Super Bright Yellow		10	uA	VR = 5V

Absolute Maximum Ratings at Ta=25°C

Parameter	Super Bright Yellow	Units
Power dissipation	125	mW
DC Forward Current	30	mA
Peak Forward Current [1]	150	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

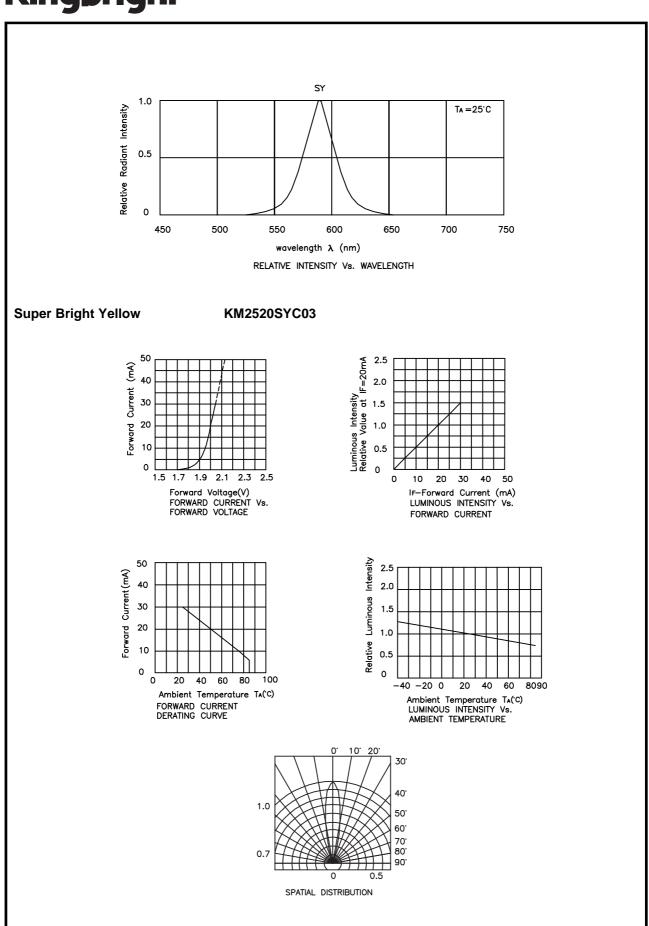
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^{1.} θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

^{1. 1/10} Duty Cycle, 0.1ms Pulse Width.

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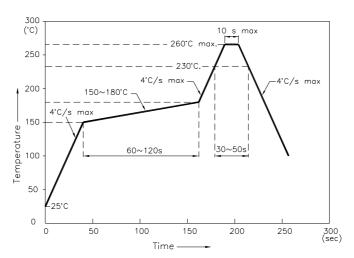


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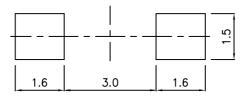
Reflow Soldering Profile For Lead-free SMT Process.



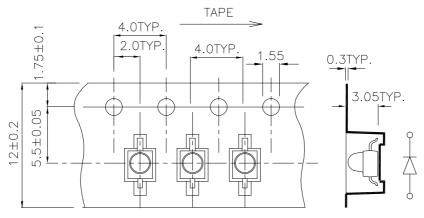
NOTES:

- 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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