

SOT-23 SURFACE MOUNT LED LAMP

Part Number: KM-23SGD-F Super Bright Green

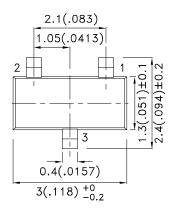
Features

- SOT-23 package surface mount LED lamp.
- Low power consumption.
- Long life solid state reliability.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

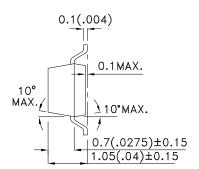
Description

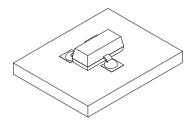
The Super Bright Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

Package Dimensions



- 1 ANODE
- 2 N.C.
- 3 CATHODE





Notes:

- All dimensions are in millimeters (inches).
 Tolerance is ±0.25(0.01") unless otherwise noted.
- 3. Lead spacing is measured where the lead emerge from the package.
- 4. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
- 5. The device has a single mounting surface. The device must be mounted according to the specifications.



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Selection Guide

Part No.	Part No. Dice Lens Type	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Тур.	201/2
KM 2200D E	Super Bright Creen (CoD)	Green Diffused	3	8	- 140°
KM-23SGD-F	Super Bright Green (GaP)	Green Dillused	*2	*5	

Notes:

- 1. θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value. 2. Luminous intensity/ luminous Flux: +/-15%.

 * Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

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 [1]	Dominant Wavelength	Super Bright Green	568		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Super Bright Green	30		nm	I=20mA
С	Capacitance	Super Bright Green	15		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Super Bright Green	2.2	2.5	V	I=20mA
lr	Reverse Current	Super Bright Green		10	uA	V _R =5V

Notes:

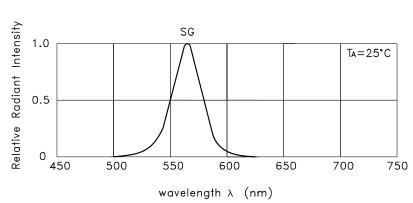
- 1. Wavelength: +/-1nm.
 2. Forward Voltage: +/-0.1V.
 3. Wavelength value is traceable to the CIE127-2007 compliant national standards.

Absolute Maximum Ratings at TA=25°C

Absolute Maximum Natings at 1A 25 6					
Parameter	Super Bright Green	Units			
Power dissipation	62.5	mW			
DC Forward Current	25	mA			
Peak Forward Current [1]	140	mA			
Reverse Voltage	5	V			
Operating Temperature	-40°C To +85°C				
Storage Temperature	-40°C To +85°C				

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

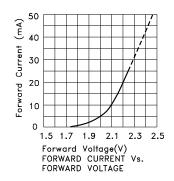
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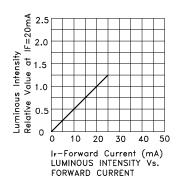


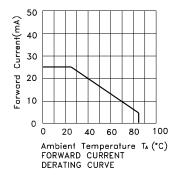
RELATIVE INTENSITY Vs. WAVELENGTH

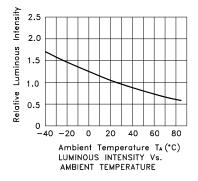
Super Bright Green

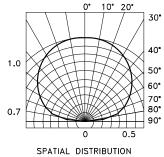
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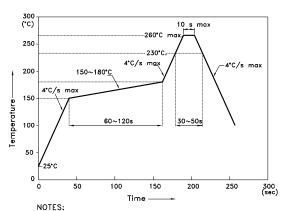
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Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.



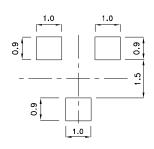
- NOTES:

 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.

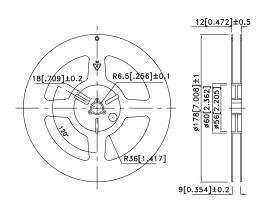
 3.Number of reflow process shall be 2 times or less.

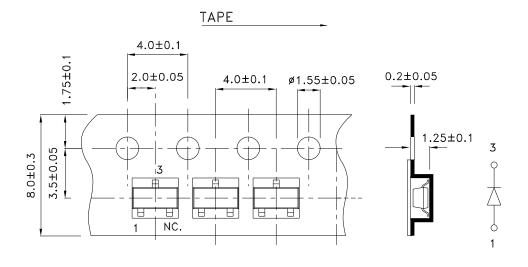
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



Tape Dimensions (Units: mm)

Reel Dimension

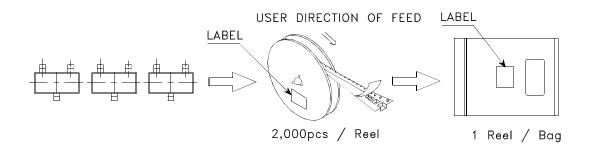


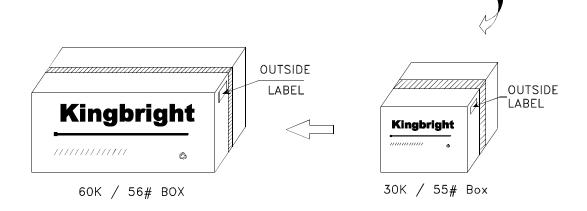


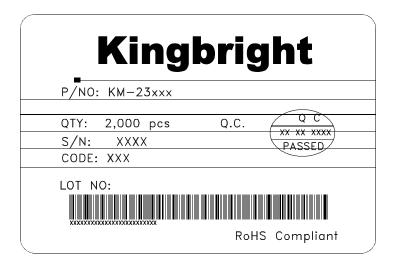
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PACKING & LABEL SPECIFICATIONS

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