

2.0x1.25mm SMD CHIP LED LAMP

Part Number: KPHCM-2012SECK

Super Bright Orange

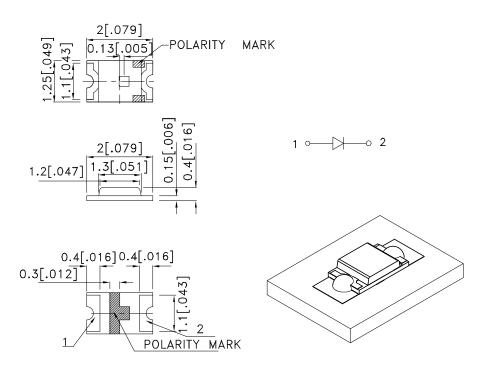
Features

- 2.0X1.25mm SMT LED,0.5mm max. thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Various colors and lens types available.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

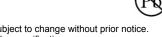
Description

The Super Bright Orange device is made with AlGaInP (on GaAs substrate) light emitting diode chip.

Package Dimensions



- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.1 (0.004")$ unless otherwise noted.
- The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
 The device has a single mounting surface. The device must be mounted according to the specifications.



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Selection Guide

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Тур.	201/2
KPHCM-2012SECK	Super Bright Orange (AlGaInP)	Water Clear	120	250	110°

- 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%.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Orange	610		nm	IF=20mA
λD [1]	Dominant Wavelength	Super Bright Orange	601		nm	I=20mA
Δλ1/2	Spectral Line Half-width	Super Bright Orange	29		nm	I==20mA
С	Capacitance	Super Bright Orange	15		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Super Bright Orange	2.1	2.5	V	I==20mA
lr	Reverse Current	Super Bright Orange		10	uA	V _R =5V

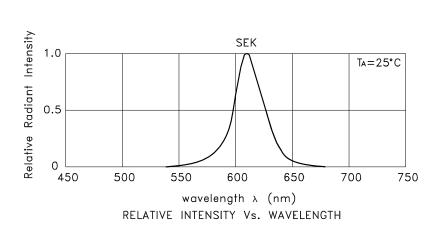
- 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

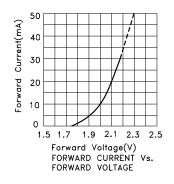
Parameter	Super Bright Orange	Units	
Power dissipation	75	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	195	mA	
Reverse Voltage	5	V	
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

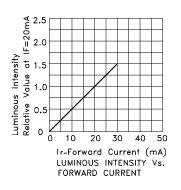
Note: 1. 1/10 Duty Cycle, 0.1ms Pulse Width.

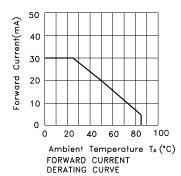
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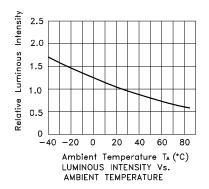


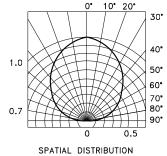
Super Bright Orange KPHCM-2012SECK











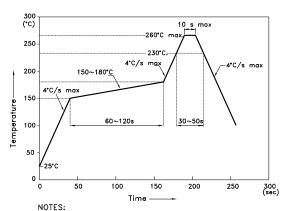
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Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.



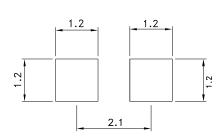
- NOTES:

 1.We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.

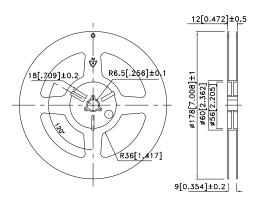
 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.

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

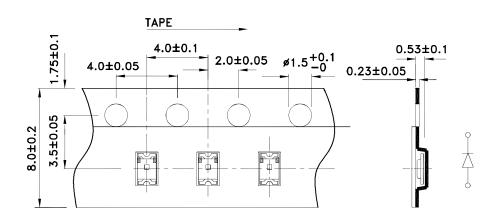
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



Reel Dimension



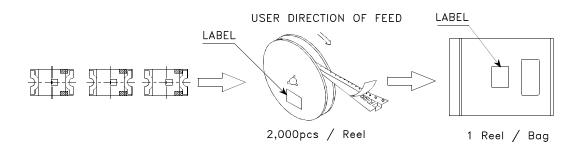
Tape Dimensions (Units: mm)

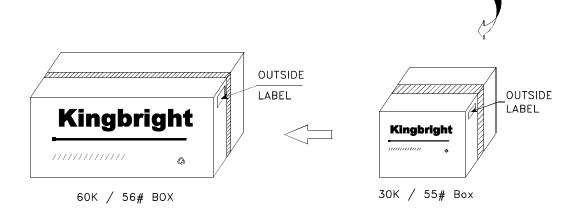


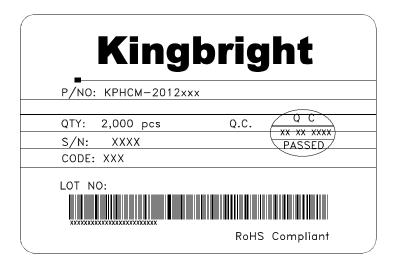
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PACKING & LABEL SPECIFICATIONS

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