

Part Number: KPHBM-2012CGKSEKC

Green  
Super Bright Orange

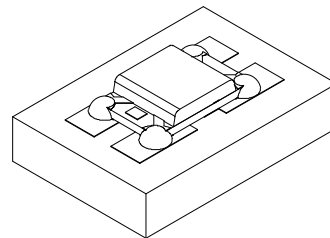
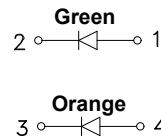
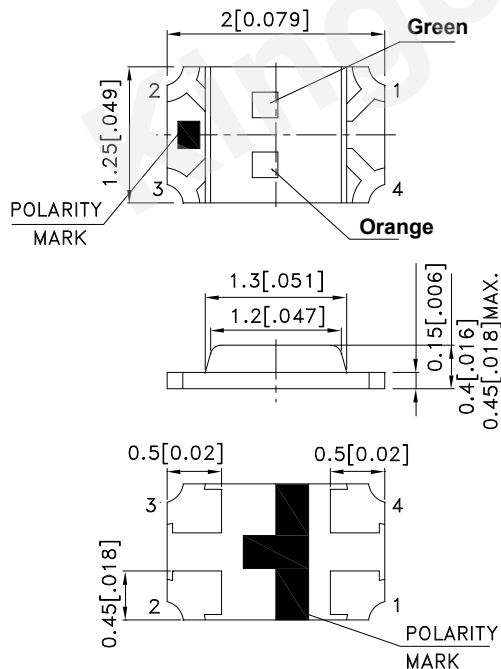
### Features

- 2.0mmx1.25mm SMD LED, 0.45mm max. thickness.
- Bi-color, low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Package : 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

### Descriptions

- The Green source color devices are made with AlGaInP on GaAs substrate Light Emitting Diode.
- The Super Bright Orange device is made with AlGaInP (on GaAs substrate) light emitting diode chip.

### Package Dimensions



#### Notes:

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



## Selection Guide

Part No.	Emitting Color (Material)	Lens Type	Iv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
KPHBM-2012CGKSEKC	Green (AlGaInP)	Water Clear	20	50	120°
			*20	*50	
			150	250	
	Super Bright Orange (AlGaInP)		*80	*180	

### Notes:

1. θ1/2 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 CIE127-2007 standards.

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

Symbol	Parameter	Emitting Color	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Green Super Bright Orange	574 610		nm	If=20mA
λD [1]	Dominant Wavelength	Green Super Bright Orange	570 601		nm	If=20mA
Δλ1/2	Spectral Line Half-width	Green Super Bright Orange	20 29		nm	If=20mA
C	Capacitance	Green Super Bright Orange	15 15		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Green Super Bright Orange	2.1 2.1	2.5 2.5	V	If=20mA
IR	Reverse Current	Green Super Bright Orange		10 10	uA	VR = 5V

### Notes:

1.Wavelength: +/-1nm.

2.Forward Voltage: +/-0.1V.

3.Wavelength value is traceable to CIE127-2007 standards.

4.Excess driving current and/or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

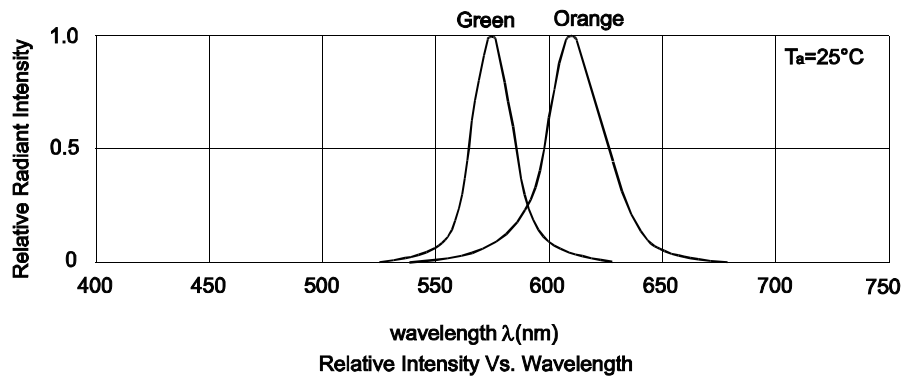
## Absolute Maximum Ratings at TA=25°C

Parameter	Green	Super Bright Orange	Units
Power dissipation	75	75	mW
DC Forward Current	30	30	mA
Peak Forward Current [1]	150	195	mA
Reverse Voltage	5		V
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

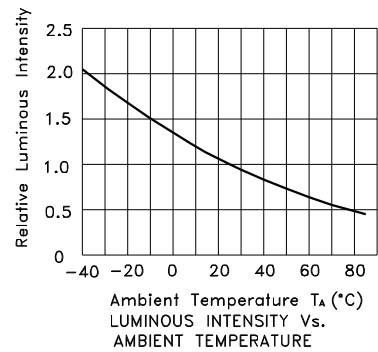
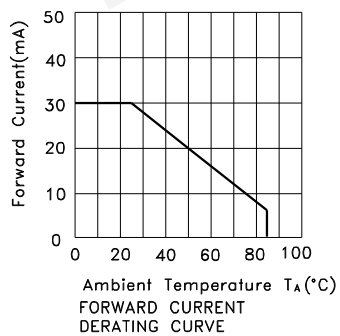
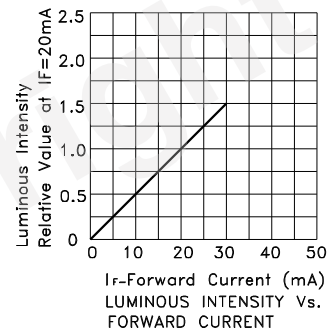
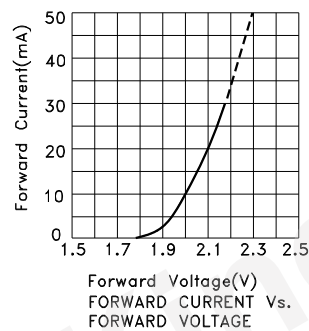
### Notes:

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

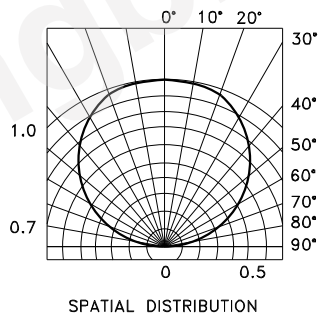
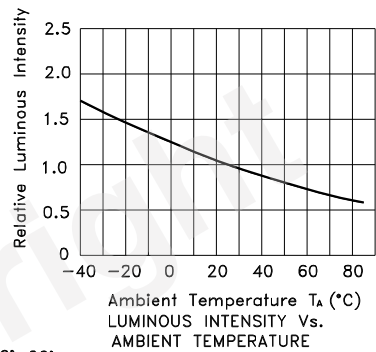
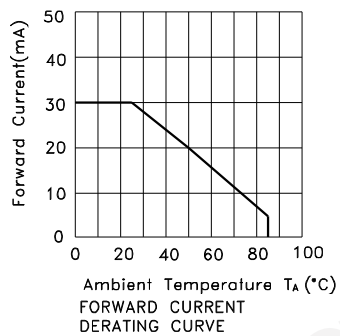
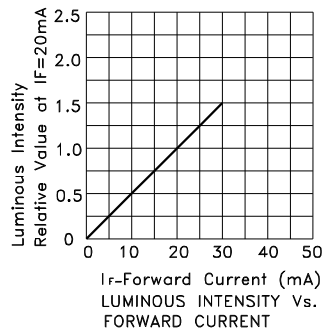
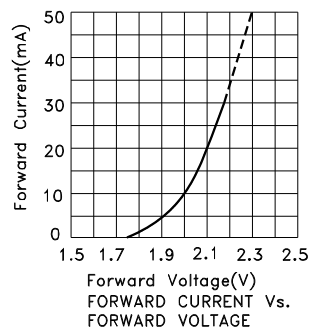
2. Relative humidity levels maintained between 40% and 60% in production area are recommended to avoid the build-up of static electricity – Ref JEDEC/JESD625-A and JEDEC/J-STD-033.



## KPHBM-2012CGKSEKC Green



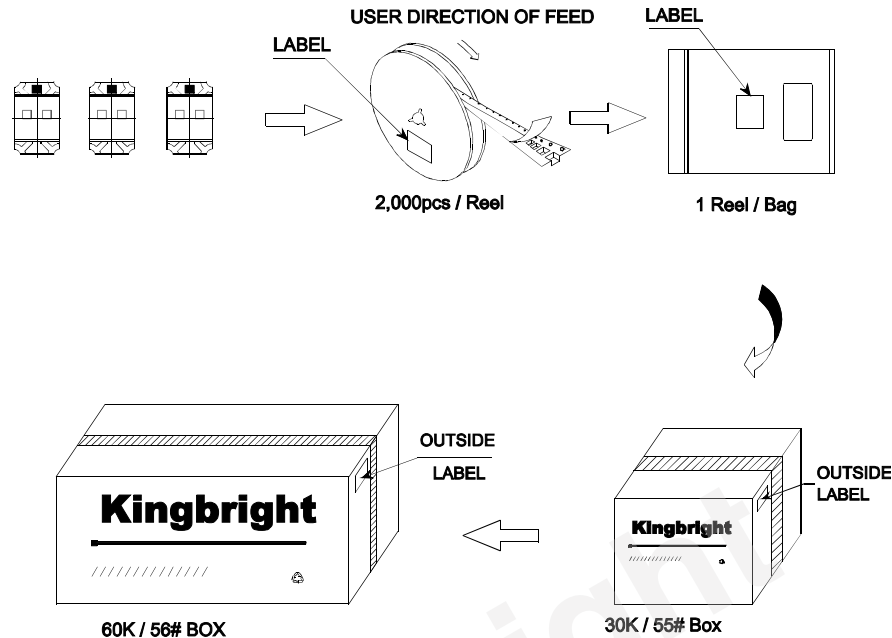
## Super Bright Orange






## PACKING & LABEL SPECIFICATIONS

KPHBM-2012CGKSEKC



<b>Kingbright</b>	
P/NO: KPHBM-2012xxx	
QTY: 2,000 pcs	Q.C.
S/N: XXXX	QC xxxxxxx PASSED
CODE: XXX	
LOT NO:	
	
RoHS Compliant	

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