

Part Number: KPBA-3010SEKCGKC

Super Bright Orange
Green

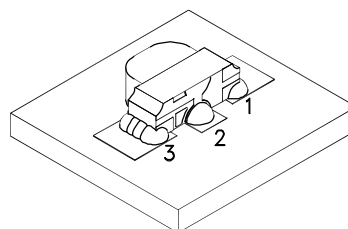
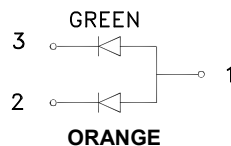
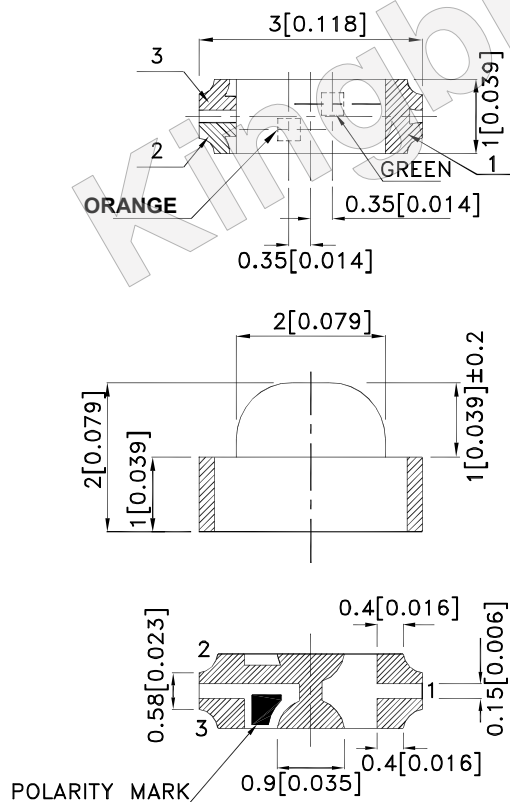
Features

- 3.0mmx2.0mmx1.0mm right angle SMD LED, 1.0mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Package : 2000 pcs / reel.
- Moisture sensitivity level : level 3.
- Tinned pads for improved solderability
- RoHS compliant.

Descriptions

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

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.15(0.006)$ 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]
			Code.	Min.	Max.	2θ1/2
KPBA-3010SEKCGKC	Super Bright Orange (AlGaInP)	Water Clear	N	120	200	140°
			P	200	300	
			Q	300	400	
	Green (AlGaInP)		G	40	55	
			H	55	80	
			M	80	120	

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%.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Emitting Color	Code.	Min.	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Orange Green			610 574		nm	IF=20mA
λD [1]	Dominant Wavelength	Super Bright Orange		598		612	nm	IF=20mA
		Green	4	565		567		
			5	567		569		
			6	569		571		
Δλ1/2	Spectral Line Half-width	Super Bright Orange Green			29 20		nm	IF=20mA
C	Capacitance	Super Bright Orange Green			15 15		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Super Bright Orange Green			2.1 2.1	2.5 2.5	V	IF=20mA
IR	Reverse Current	Super Bright Orange Green				10 10	uA	VR = 5V

Notes:

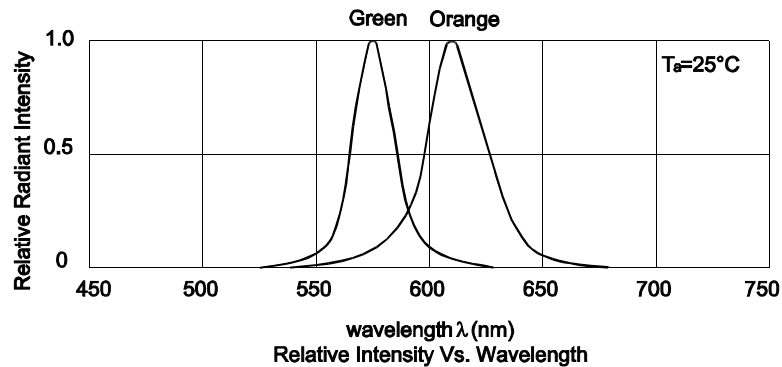
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.
3. Excess driving current and / or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

Absolute Maximum Ratings at TA=25°C

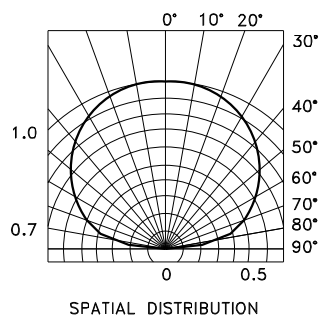
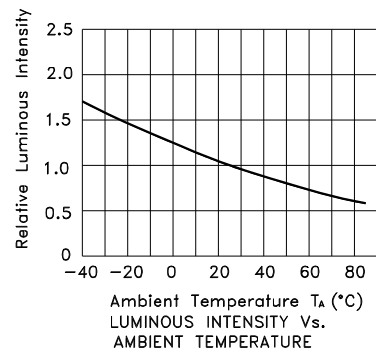
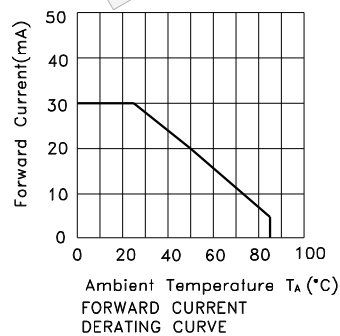
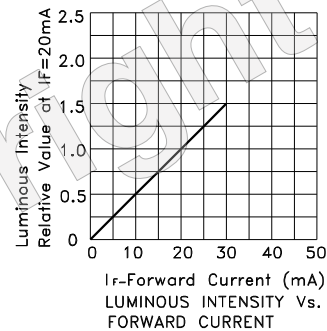
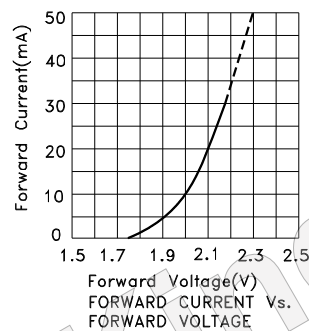
Parameter	Super Bright Orange	Green	Units
Power dissipation	75	75	mW
DC Forward Current	30	30	mA
Peak Forward Current [1]	195	150	mA
Reverse Voltage	5		V
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

Notes:

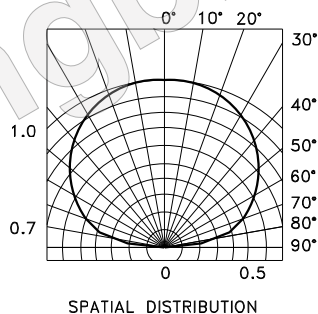
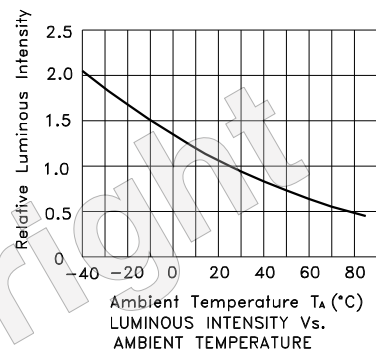
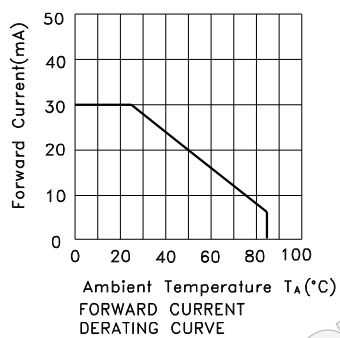
1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. Relative humidity levels maintained between 40% and 60% in production area are recommended to avoid the build-up of static electricity – Ref JEDEC/JESD625-A and JEDEC/J-STD-033.



KPBA-3010SEKCGKC Super Bright Orange



Green



KPBA-3010SEKCGKC

**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.**

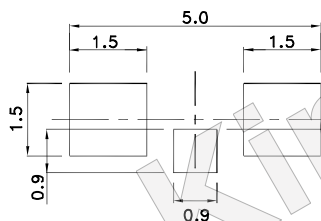
Reflow Soldering Profile For Lead-free SMT Process.



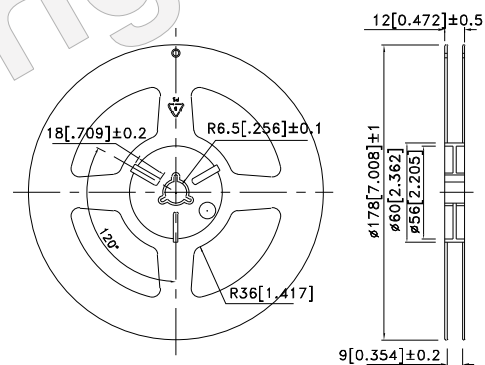
NOTES:

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.

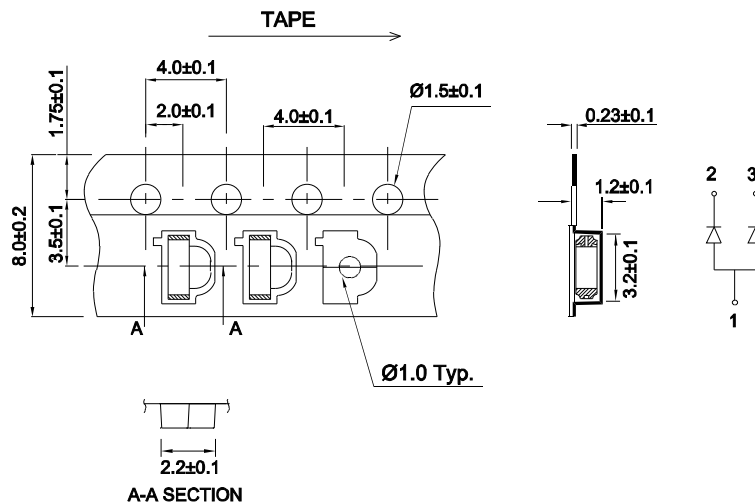
Recommended Soldering Pattern
(Units : mm; Tolerance: ± 0.1)



Reel Dimension

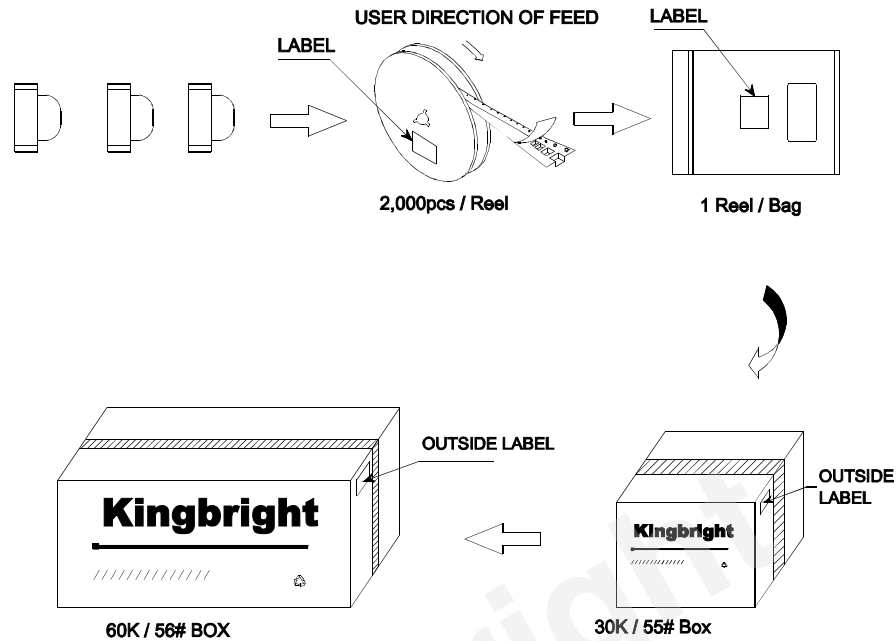



Tape Dimensions (Units : mm)



PACKING & LABEL SPECIFICATIONS

KPBA-3010SEKCGKC



Kingbright		
P/NO: KPBA-3010XXX		
QTY: 2,000 pcs	Q.C.	QC XX-XX-XXXX PASSED
S/N: XXXX		
CODE: XXX		
LOT NO:		
		
RoHS Compliant		

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