

Part Number: KPDA-3020LVSECK-J4-PF

Super Bright Orange

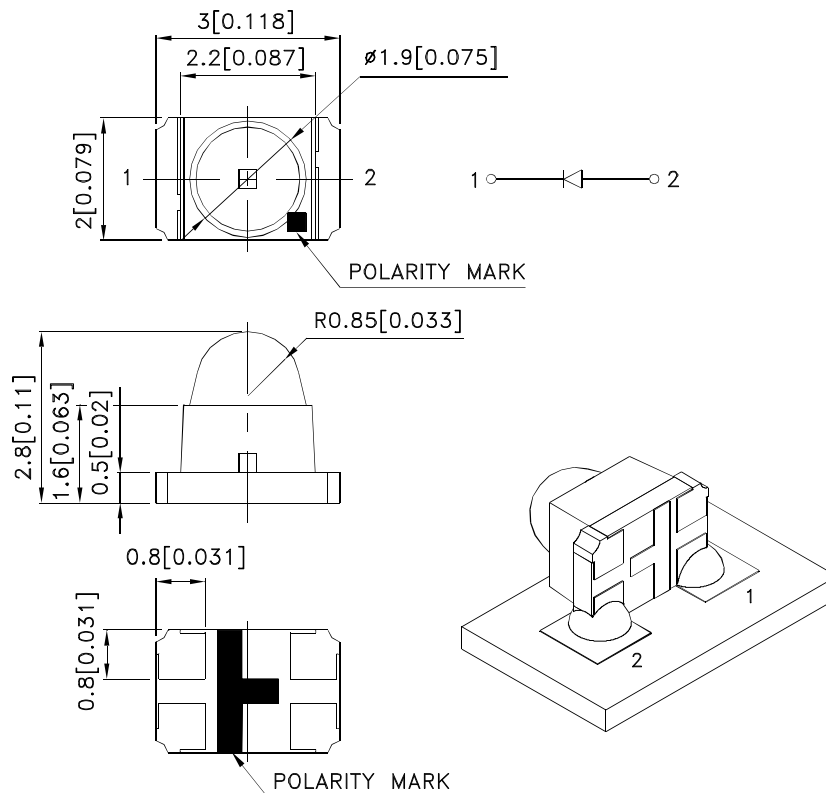
### Features

- 3.0mmx2.0mm SMD LED, 2.8mm thickness.
- Low power consumption.
- Ideal for back light and indicator
- Package : 2000pcs / reel.
- Moisture sensitivity level : level 3.
- Tinned pads for improved solderability.
- Low current IF=2mA operating.
- RoHS compliant.

### Description

The Orange source color devices are made with AlGaInP Light Emitting Diode.

### Package Dimensions



#### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2$  (0.008") 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] @ 2mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
KPDA-3020LVSECK-J4-PF	Super Bright Orange (AlGaInP)	Water Clear	1000	1800	10°
			*550	*1000	

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	Super Bright Orange	611		nm	IF=2mA
λD [1]	Dominant Wavelength	Super Bright Orange	605		nm	IF=2mA
Δλ1/2	Spectral Line Half-width	Super Bright Orange	17		nm	IF=2mA
C	Capacitance	Super Bright Orange	27		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Super Bright Orange	1.8	2.1	V	IF=2mA
IR	Reverse Current	Super Bright Orange		10	uA	VR=5V

Notes:

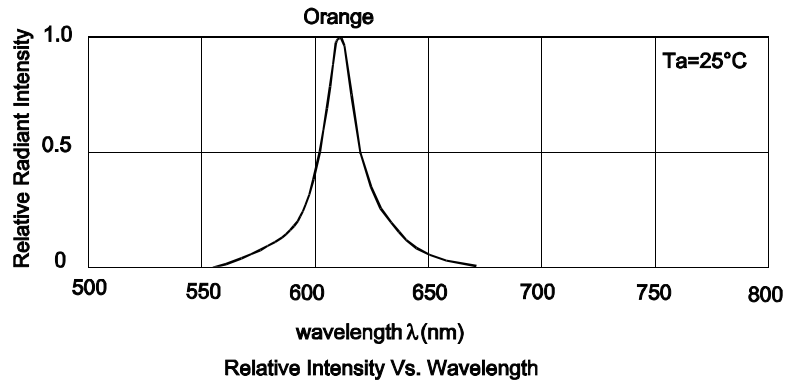
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.
3. Wavelength value is traceable to CIE127-2007 standards.
4. Excess driving current and / or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

## Absolute Maximum Ratings at TA=25°C

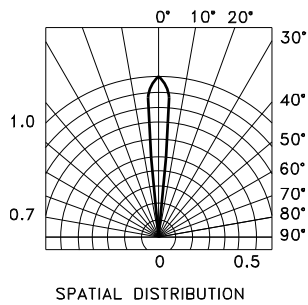
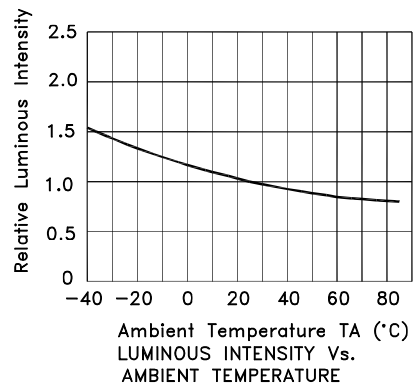
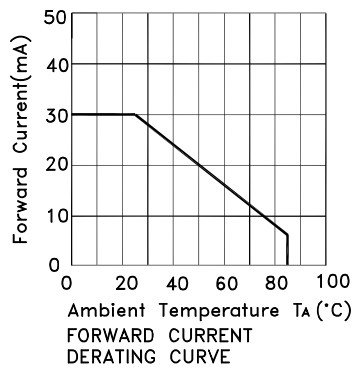
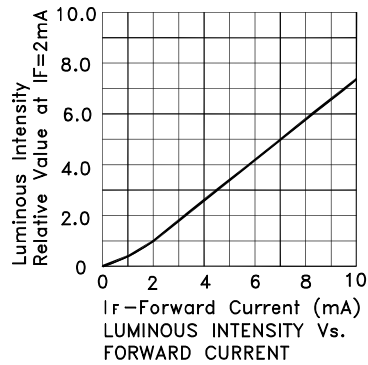
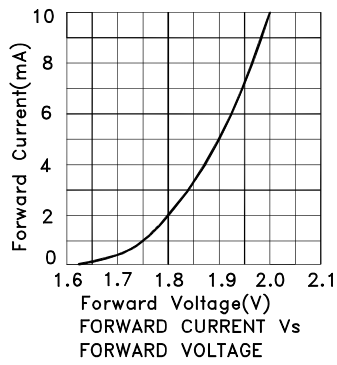
Parameter	Values	Units
Power dissipation	63	mW
DC Forward Current	30	mA
Peak Forward Current [1]	150	mA
Reverse Voltage	5	V
Operating Temperature	-40°C To +85°C	
Storage Temperature	-40°C To +85°C	

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.



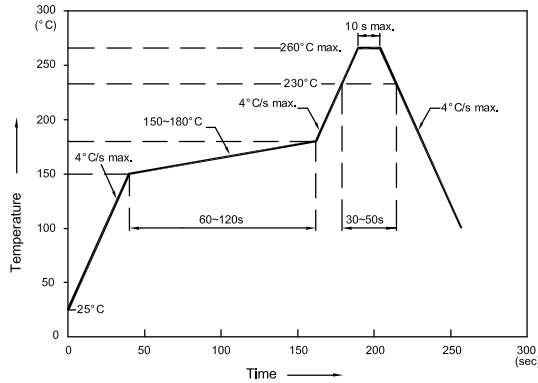
**Super Bright Orange KPDA-3020LVSECK-J4-PF**



## KPDA-3020LVSECK-J4-PF

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.

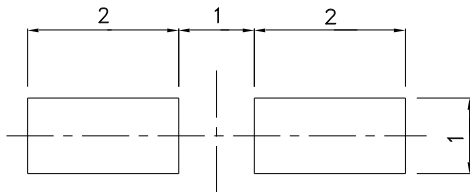
Reflow Soldering Profile For Lead-free SMT Process.



**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.

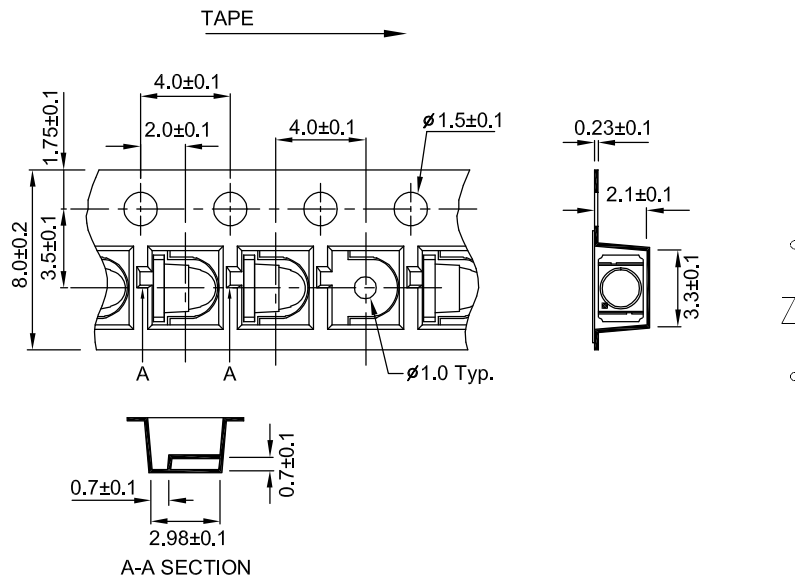
### Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



### Reel Dimension

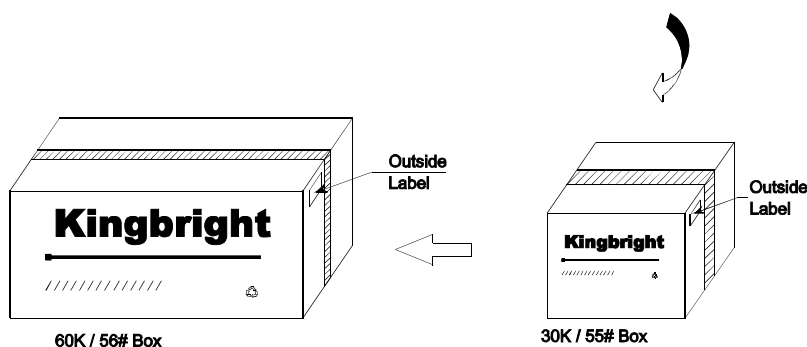
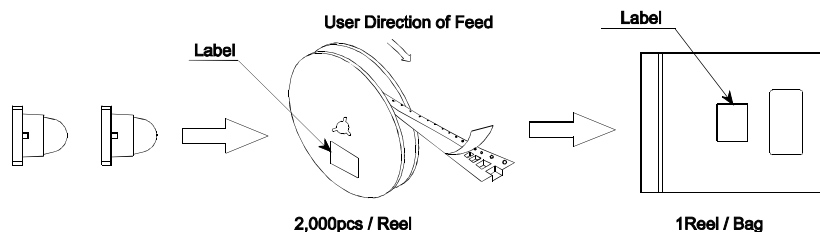


### Tape Dimensions (Units : mm)



## PACKING & LABEL SPECIFICATIONS

## KPDA-3020LVSECK-J4-PF



<h1>Kingbright</h1>		
P/NO: KPDA-3020XXX		
QTY: 2,000 pcs	Q.C.	Q C XX XX XXX PASSED
S/N: XXXX		
CODE: XXX		
LOT NO:		
		
RoHS Compliant		

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1. The information included in this document reflects representative usage scenarios and is intended for technical reference only.
2. The part number, type, and specifications mentioned in this document are subject to future change and improvement without notice. Before production usage customer should refer to the latest datasheet for the updated specifications.
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