

2.1x0.6mm RIGHT ANGLE SURFACE LED LAMP

Part Number: KPA-2106SECK

Super Bright Orange

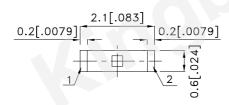
Features

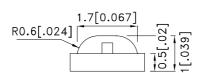
- 2.1mmX0.6mm right angle SMT LED, 1.0mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 3.
- Tinned pads for improved solderability.
- RoHS compliant.

Description

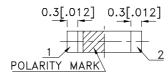
The Super Bright Orange device is made with AlGaInP (on GaAs substrate) light emitting diode chip.

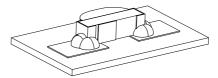
Package Dimensions











- 1. All dimensions are in millimeters (inches).
- 2.Tolerance is ±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





SPEC NO: DSAA4770 **REV NO: V.16A DATE: NOV/27/2014** PAGE: 1 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: L.Q.Xie ERP: 1203000518

Selection Guide

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
		2.	Min.	Тур.	201/2
KDV 34000EOK	Super Bright Orange (AlGaInP)	Matan Class	110	250	120°
KPA-2106SECK		Water Clear	*80	*180	

Notes:

- $1. \theta 1/2$ is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
- 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 Orange	610		nm	IF=20mA
λD [1]	Dominant Wavelength	Super Bright Orange	601		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Super Bright Orange	29		nm	IF=20mA
С	Capacitance	Super Bright Orange	15		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Super Bright Orange	2.1	2.5	V	IF=20mA
lr	Reverse Current	Super Bright Orange		10	uA	VR=5V

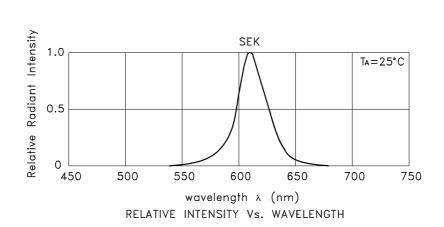
- 1.Wavelength: +/-1nm.
- 2.Forward Voltage: +/-0.1V.
- 3. Wavelength value is traceable to the CIE127-2007 compliant national standards.
- 4.Excess driving current and/or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

Absolute Maximum Ratings at TA=25°C

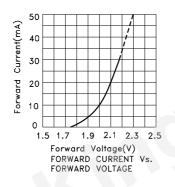
Parameter	Super Bright Orange	Units	
Power dissipation	75		
DC Forward Current	30	mA	
Peak Forward Current [1]	195	mA	
Reverse Voltage	5	V	
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

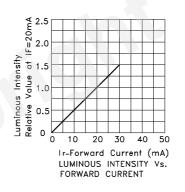
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

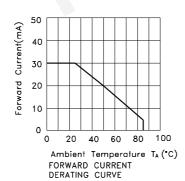
SPEC NO: DSAA4770 **REV NO: V.16A DATE: NOV/27/2014** PAGE: 2 OF 5 **APPROVED: WYNEC CHECKED: Allen Liu** ERP: 1203000518 DRAWN: L.Q.Xie

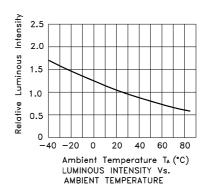


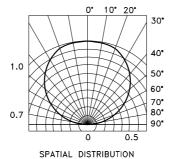
Super Bright Orange KPA-2106SECK











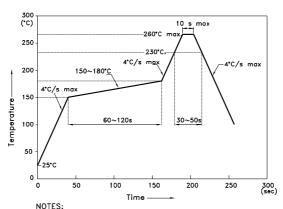
 SPEC NO: DSAA4770
 REV NO: V.16A
 DATE: NOV/27/2014
 PAGE: 3 OF 5

 APPROVED: WYNEC
 CHECKED: Allen Liu
 DRAWN: L.Q.Xie
 ERP: 1203000518

KPA-2106SECK

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.



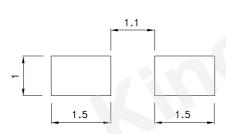
- NOTES:

 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.

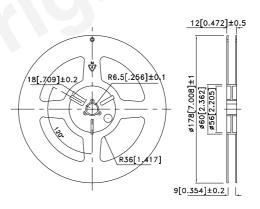
 3.Number of reflow process shall be 2 times or less.

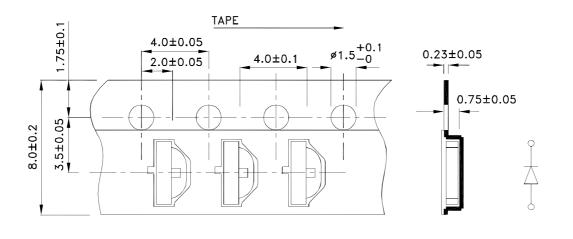
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



Tape Dimensions (Units: mm)

Reel Dimension

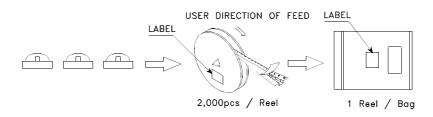


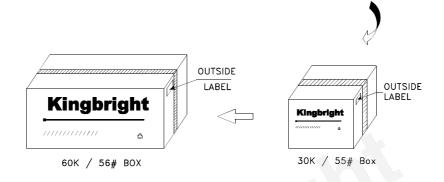


SPEC NO: DSAA4770 **REV NO: V.16A DATE: NOV/27/2014** PAGE: 4 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: L.Q.Xie ERP: 1203000518

PACKING & LABEL SPECIFICATIONS

KPA-2106SECK







Terms and conditions for the usage of this document

- 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.
- 3. When using the products referenced in this document, please make sure the product is being operated within the environmental and electrical limits specified in the datasheet. If customer usage exceeds the specified limits, Kingbright will not be responsible for any subsequent issues.
- 4. The information in this document applies to typical usage in consumer electronics applications. If customer's application has special reliability requirements or have life-threatening liabilities, such as automotive or medical usage, please consult with Kingbright representative for further
- 5. The contents and information of this document may not be reproduced or re-transmitted without permission by Kingbright.
- 6.All design applications should refer to Kingbright application notes available at http://www.kingbright.com/application notes

SPEC NO: DSAA4770 **REV NO: V.16A** DATE: NOV/27/2014 PAGE: 5 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: L.Q.Xie ERP: 1203000518