

2.1x0.6mm RIGHT ANGLE SURFACE LED **LAMP**

Part Number: KPA-2106SECK-J3 Hyper Red

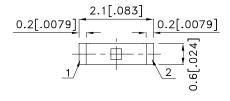
Features

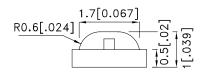
- 2.1mmX0.6mm right angle SMT LED, 1.0mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Various colors and lens types available.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 3.
- Tinned pads for improved solderability.
- RoHS compliant.

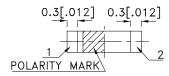
Description

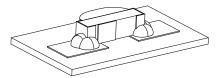
The Hyper Red device is based on light emitting diode chip made from AlGaInP.

Package Dimensions









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- 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

CHECKED: Allen Liu

DRAWN: Y.Liu



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Selection Guide

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
		2.	Min.	Тур.	201/2
KPA-2106SECK-J3	Hyper Red (AlGaInP)	Water Clear	700	1100	- 120°
		vvalei Ciedi	*200	*380	

Notes:

- θ1/2 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	Hyper Red	640		nm	IF=20mA
λD [1]	Dominant Wavelength	Hyper Red	625		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Hyper Red	20		nm	I=20mA
С	Capacitance	Hyper Red	27		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Hyper Red	2.2	2.8	V	IF=20mA
lr	Reverse Current	Hyper Red		10	uA	VR=5V

Notes:

- 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.
- 3. Wavelength value is traceable to the CIE127-2007 compliant national standards.

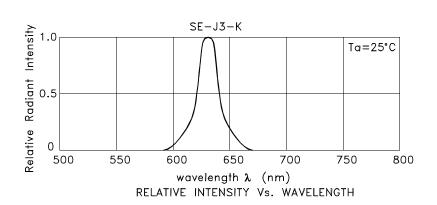
Absolute Maximum Ratings at TA=25°C

Parameter	Hyper Red	Units				
Power dissipation	84	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					

Note:

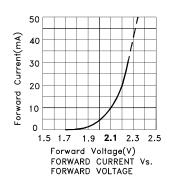
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

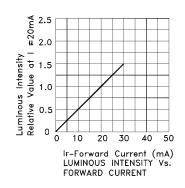
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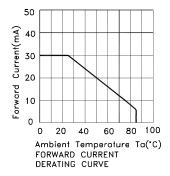


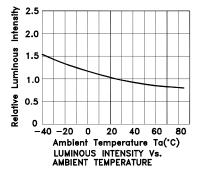
Hyper Red

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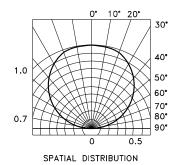








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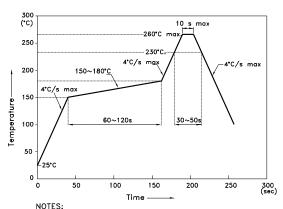


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Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

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.

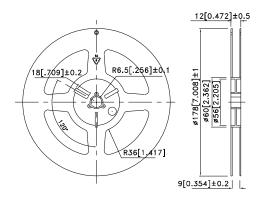
 3.Number of reflow process shall be 2 times or less.

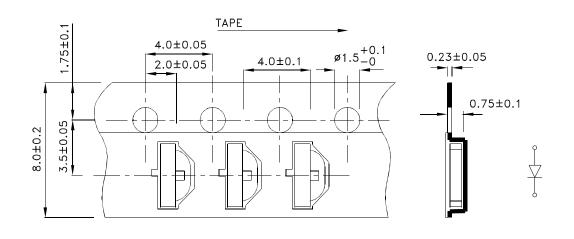
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)

1.5 1.5

Tape Dimensions (Units: mm)

Reel Dimension





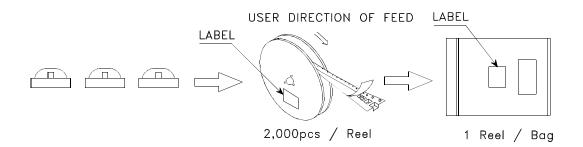
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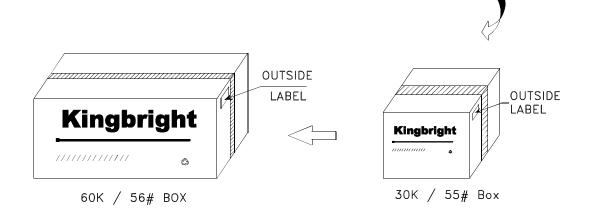
DRAWN: Y.Liu

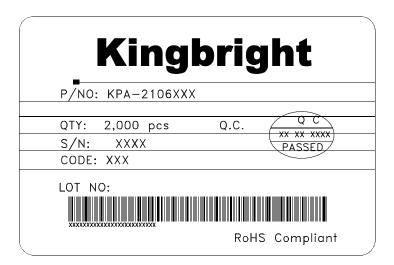
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PACKING & LABEL SPECIFICATIONS

KPA-2106SECK-J3







Detailed application notes are listed on our website. http://www.kingbright.com/application_notes

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