

3. 0mmx1.0 mm RIGHT ANGLE SMD CHIP LED **LAMP**

Part Number: KPPA-3010SURCK Hyper Red

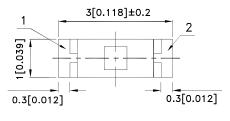
Features

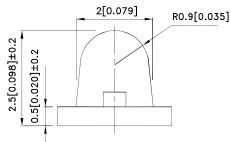
- 3.0mm x 1.0mm right angle SMT LED, 2.5mm thickness.
- Low power consumption.
- Ideal for back light and indicator.
- Various colors and lens types available.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 3.
- Tinned pads for improved solderability.
- RoHS compliant.

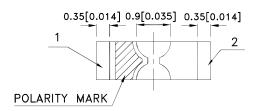
Description

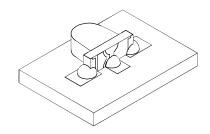
The Hyper Red source color devices are made with Al-GaInP on GaAs substrate Light Emitting Diode.

Package Dimensions









- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ±0.15(0.006") unless otherwise noted.
- The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
 The device has a single mounting surface. The device must be mounted according to the specifications.

SPEC NO: DSAF4214 **REV NO: V.4A DATE: NOV/27/2013** PAGE: 1 OF 5 **APPROVED: WYNEC CHECKED: Allen Liu** DRAWN: Y.Liu ERP: 1203004347

Selection Guide

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
		2.	Min.	Тур.	201/2
KPPA-3010SURCK	Hyper Red (AlGaInP)	Water Clear	400	700	30°
			*120	*220	

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	645		nm	IF=20mA
λD [1]	Dominant Wavelength	Hyper Red	630		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Hyper Red	28		nm	IF=20mA
С	Capacitance	Hyper Red	35		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Hyper Red	1.95	2.5	V	IF=20mA
lr	Reverse Current	Hyper Red		10	uA	VR=5V

Notes:

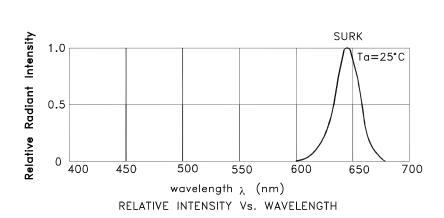
- 1.Wavelength: +/-1nm.
- 2. Forward Voltage: +/-0.1V.
- 3. Wavelength value is traceable to the CIE127-2007 compliant national standards.

Absolute Maximum Ratings at TA=25°C

Parameter	Hyper Red	Units	
Power dissipation	75	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	185	mA	
Reverse Voltage	5	V	
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

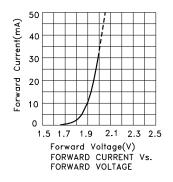
Note: 1. 1/10 Duty Cycle, 0.1ms Pulse Width.

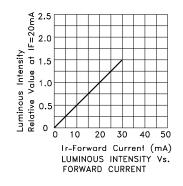
SPEC NO: DSAF4214 **REV NO: V.4A** DATE: NOV/27/2013 PAGE: 2 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: Y.Liu ERP: 1203004347

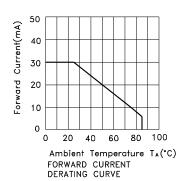


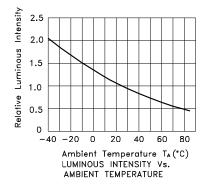
Hyper Red

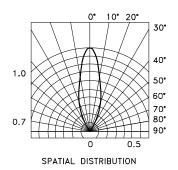
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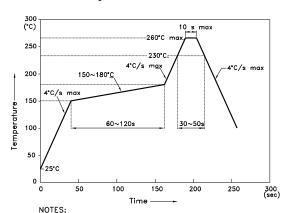


SPEC NO: DSAF4214 REV NO: V.4A DATE: NOV/27/2013 PAGE: 3 OF 5
APPROVED: WYNEC CHECKED: Allen Liu DRAWN: Y.Liu ERP: 1203004347

KPPA-3010SURCK

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.

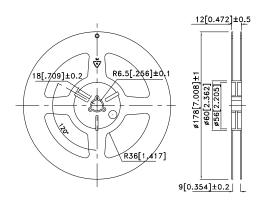
 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.
 - 3.Number of reflow process shall be 2 times or less.

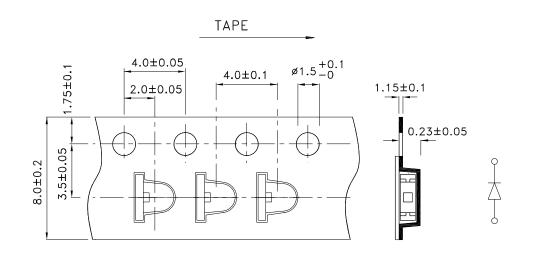
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)

5 1.5 2 1.5 0.9 0.9

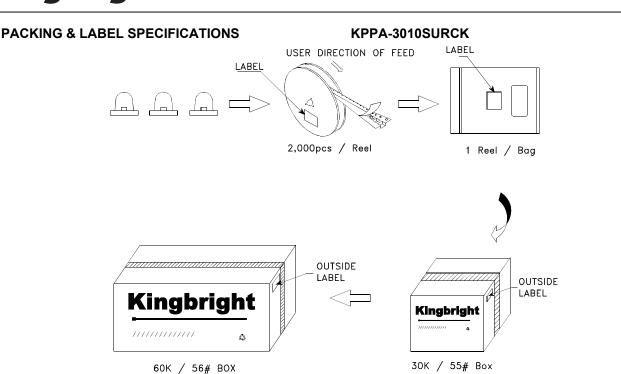
Tape Dimensions (Units : mm)

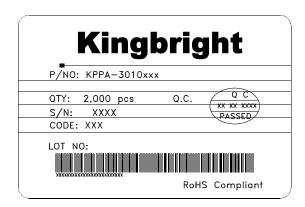
Reel Dimension





SPEC NO: DSAF4214 REV NO: V.4A DATE: NOV/27/2013 PAGE: 4 OF 5
APPROVED: WYNEC CHECKED: Allen Liu DRAWN: Y.Liu ERP: 1203004347





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SPEC NO: DSAF4214 REV NO: V.4A DATE: NOV/27/2013 PAGE: 5 OF 5
APPROVED: WYNEC CHECKED: Allen Liu DRAWN: Y.Liu ERP: 1203004347