

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

Part Number: APA2106SECK/J3-PRV Hyper Red

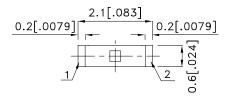
#### **Features**

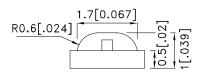
- 2.1mmX0.6mm right angle SMT LED, 1.0mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Various colors and lens types available.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 3.
- Tinned pads for improved solderability.
- RoHS compliant.

### Description

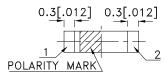
The Hyper Red device is based on light emitting diode chip made from AlGaInP.

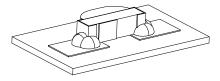
# **Package Dimensions**











- 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

SPEC NO: DSAN2798 **REV NO: V.1A DATE: OCT/15/2013** APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: Q.M.Chen



PAGE: 1 OF 5

ERP: 1203014043

### **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
		2.	Min.	Тур.	201/2
APA2106SECK/J3-PRV	Hyper Red (AlGaInP)	Water Clear	700	1100	- 120°
			*200	*380	

#### Notes:

- 1. 01/2 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 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	I==20mA
λD [1]	Dominant Wavelength	Hyper Red	625		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Hyper Red	20		nm	IF=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:

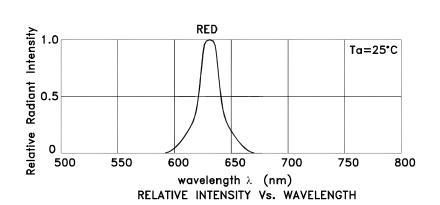
- 1.Wavelength: +/-1nm.
- 2. Forward Voltage: +/-0.1V.
- 3. Wavelength value is traceable to the CIE127-2007 compliant national standards.

# Absolute Maximum Ratings at TA=25°C

Parameter	Hyper Red	Units	
Power dissipation	dissipation 84		
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		

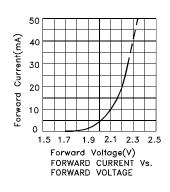
Note: 1. 1/10 Duty Cycle, 0.1ms Pulse Width.

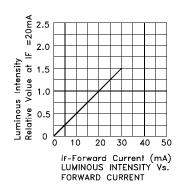
SPEC NO: DSAN2798 **REV NO: V.1A** DATE: OCT/15/2013 PAGE: 2 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: Q.M.Chen ERP: 1203014043

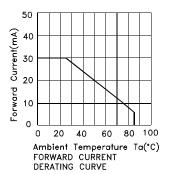


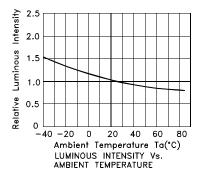
# **Hyper Red**

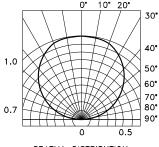
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SPATIAL DISTRIBUTION

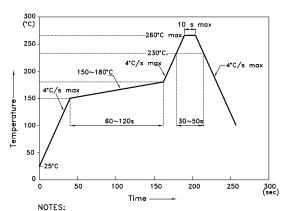
 SPEC NO: DSAN2798
 REV NO: V.1A
 DATE: OCT/15/2013
 PAGE: 3 OF 5

 APPROVED: WYNEC
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 DRAWN: Q.M.Chen
 ERP: 1203014043

### APA2106SECK/J3-PRV

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.



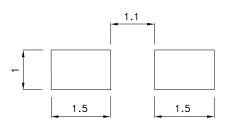
- NOTES:

  1.We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.

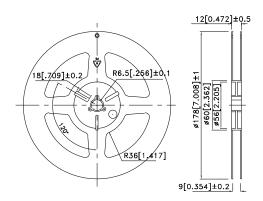
  2.Don't cause stress to the epoxy resin while it is exposed to high temperature.

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

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

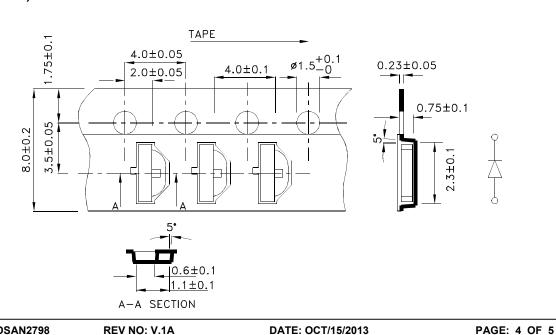


### **Reel Dimension**



ERP: 1203014043

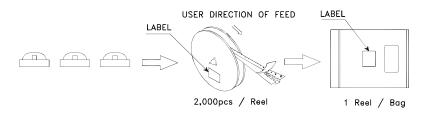
**Tape Dimensions** (Units: mm)

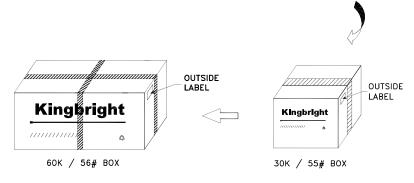


SPEC NO: DSAN2798 **REV NO: V.1A** DATE: OCT/15/2013 **APPROVED: WYNEC CHECKED: Allen Liu** DRAWN: Q.M.Chen

# **PACKING & LABEL SPECIFICATIONS**

### APA2106SECK/J3-PRV







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 SPEC NO: DSAN2798
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 PAGE: 5 OF 5

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