

2.0x1.25mm SMD CHIP LED LAMP

Part Number: APT2012LSECK/J3-PRV Hyper Red

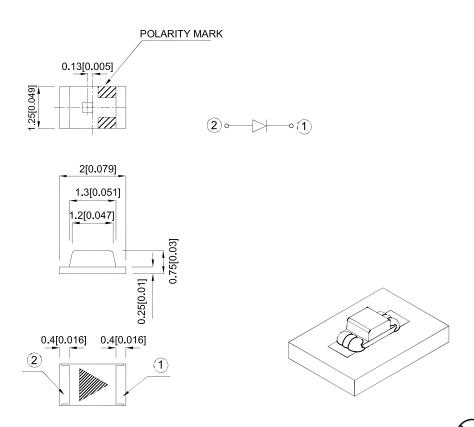
Features

- 2.0mmx1.25mm SMT LED,0.75mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 3.
- Low current IF=2mA operating.
- RoHS compliant.

Description

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

Package Dimensions



SPEC NO: DSAN8393

APPROVED: WYNEC

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.1(0.004")$ 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.

REV NO: V.2A

CHECKED: Allen Liu

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Selection Guide

Part No.	Dice	Lens Type	lv (mcd) [2] @ 2mA		Viewing Angle [1]
			Min.	Тур.	201/2
APT2012LSECK/J3-PRV	Hyper Red (AlGaInP)	Water Clear	50	100	120°
			*20	*40	

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	Min.	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Hyper Red		640		nm	IF=2mA
λD [1]	Dominant Wavelength	Hyper Red		625		nm	IF=2mA
Δλ1/2	Spectral Line Half-width	Hyper Red		20		nm	IF=2mA
С	Capacitance	Hyper Red		27		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Hyper Red	1.5	1.8	2.1	V	IF=2mA
lr	Reverse Current	Hyper Red			10	uA	V _R =5V

Notes:

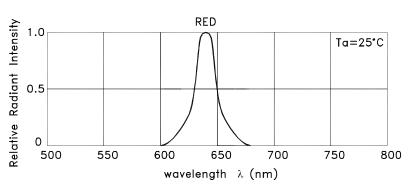
- 1.Wavelength: +/-1nm. 2.Forward Voltage: +/-0.1V.
- 3. Wavelength value is traceable to the CIE127-2007 compliant national standards.
- 4. Excess driving current and/or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

Absolute Maximum Ratings at TA=25°C

Absolute maximum Natings at TA 20 0					
Parameter	Hyper Red	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	-40°C To +85°C			
Storage Temperature	-40°C To +85°C	-40°C To +85°C			

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

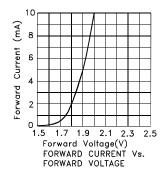
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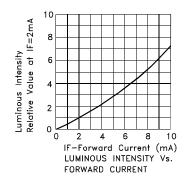


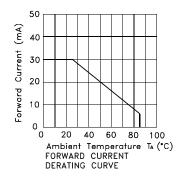
RELATIVE INTENSITY Vs. WAVELENGTH

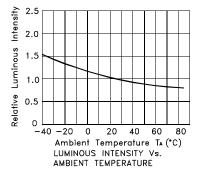
Hyper Red

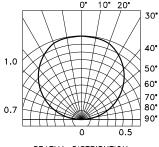
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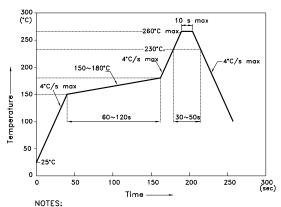
SPATIAL DISTRIBUTION

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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.

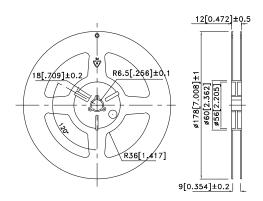
 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.

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

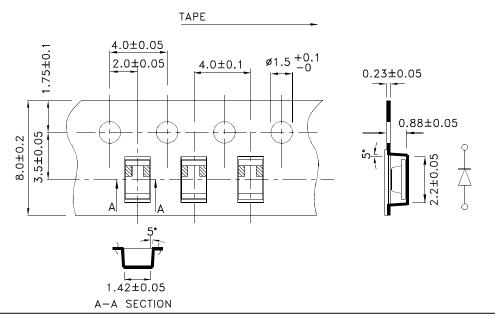
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



Reel Dimension



Tape Dimensions (Units: mm)



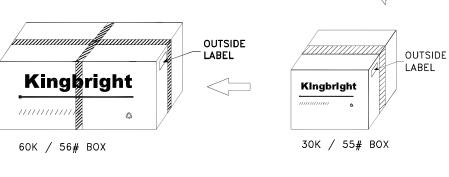
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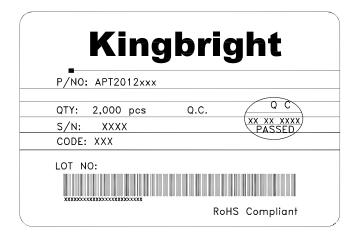
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PACKING & LABEL SPECIFICATIONS APT2012LSECK/J3-PRV USER DIRECTION OF FEED LABEL 2,000PCS / REEL 1 REEL / BAG





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