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3.0x2.0mm RIGHT ANGLE SMD LED

Part Number: APDA3020LSECK/J3-PF Hyper Red

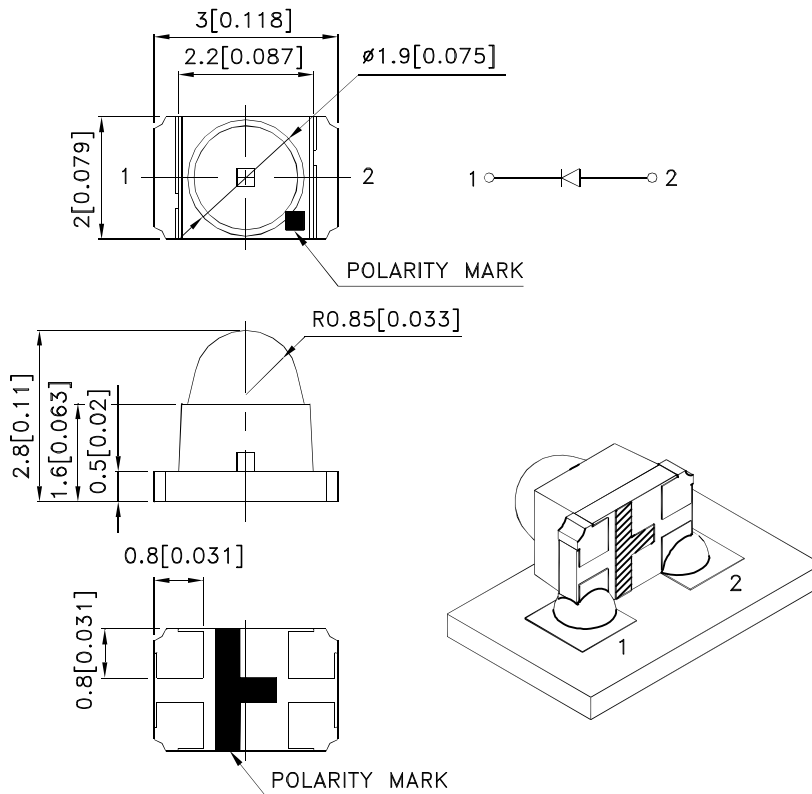
Features

- 3.0mmx2.0mm SMT LED, 2.8mm thickness.
- Low power consumption.
- Ideal for back light and indicator
- Package : 2000pcs / reel.
- Moisture sensitivity level : level 3.
- Tinned pads for improved solderability.
- Low current IF=2mA operating.
- RoHS compliant.

Description

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

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.2(0.008)$ 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.



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Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) [2] @ 2mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
APDA3020LSECK/J3-PF	Hyper Red (AlGaInP)	Water Clear	700	1000	10°
			*250	*500	

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	Min.	Typ.	Max.	Units	Test Conditions
λ _{peak}	Peak Wavelength	Hyper Red		640		nm	I _F =2mA
λ _D [1]	Dominant Wavelength	Hyper Red		625		nm	I _F =2mA
Δλ _{1/2}	Spectral Line Half-width	Hyper Red		20		nm	I _F =2mA
C	Capacitance	Hyper Red		27		pF	V _F =0V;f=1MHz
V _F [2]	Forward Voltage	Hyper Red	1.5	1.8	2.1	V	I _F =2mA
I _R	Reverse Current	Hyper Red			10	uA	V _R =5V

Notes:

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

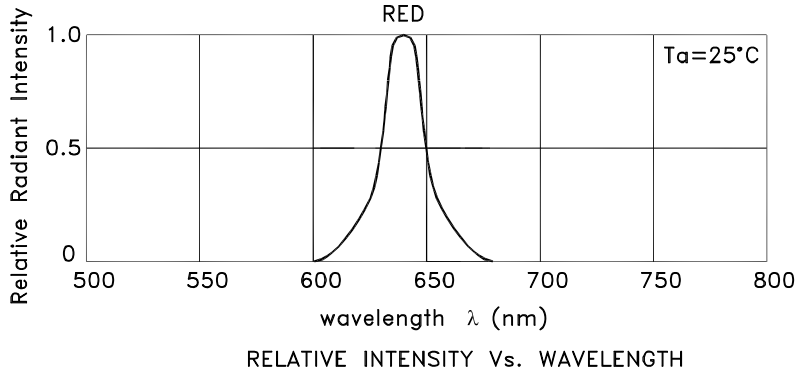
Absolute Maximum Ratings at TA=25°C

Parameter	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	
Storage Temperature	-40°C To +85°C	

Note:

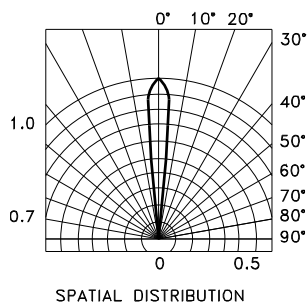
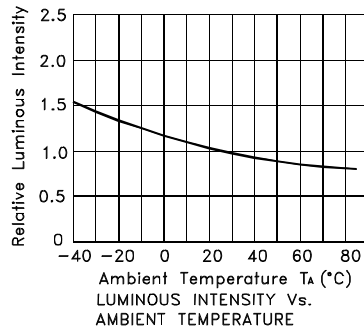
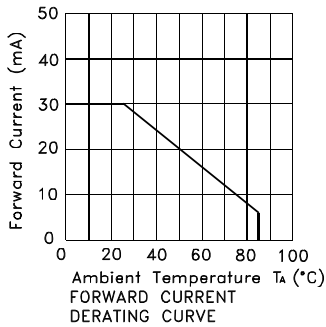
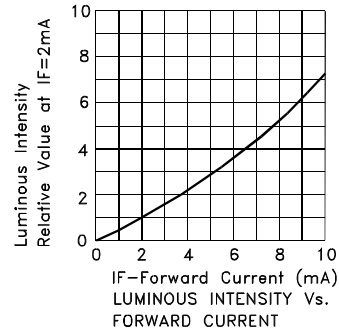
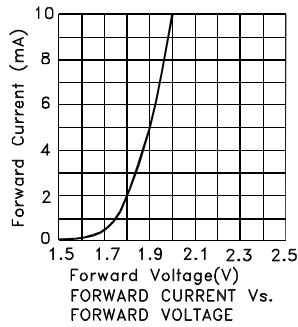
- 1/10 Duty Cycle, 0.1ms Pulse Width.

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Hyper Red

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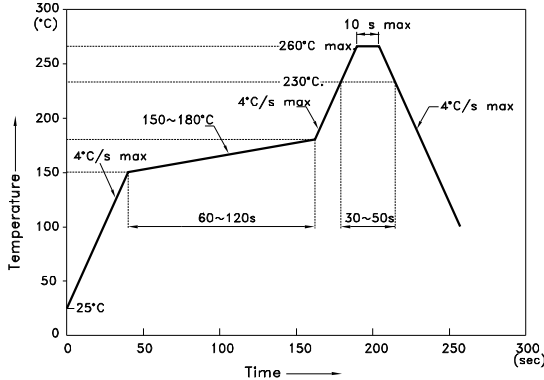


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Reflow soldering is recommended and the soldering profile is shown below.
 Other soldering methods are not recommended as they might cause damage to the product.

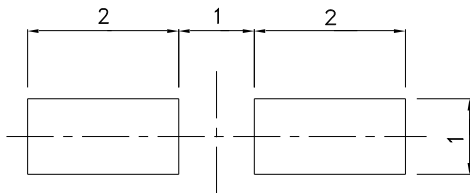
Reflow Soldering Profile For Lead-free SMT Process.



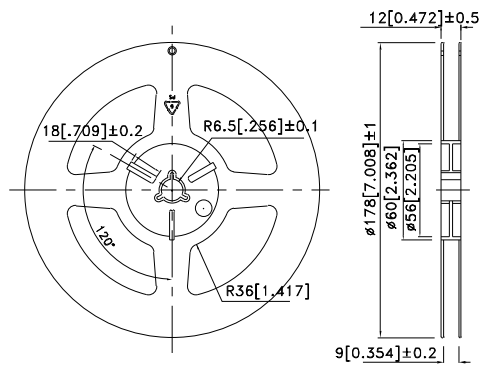
NOTES:

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.

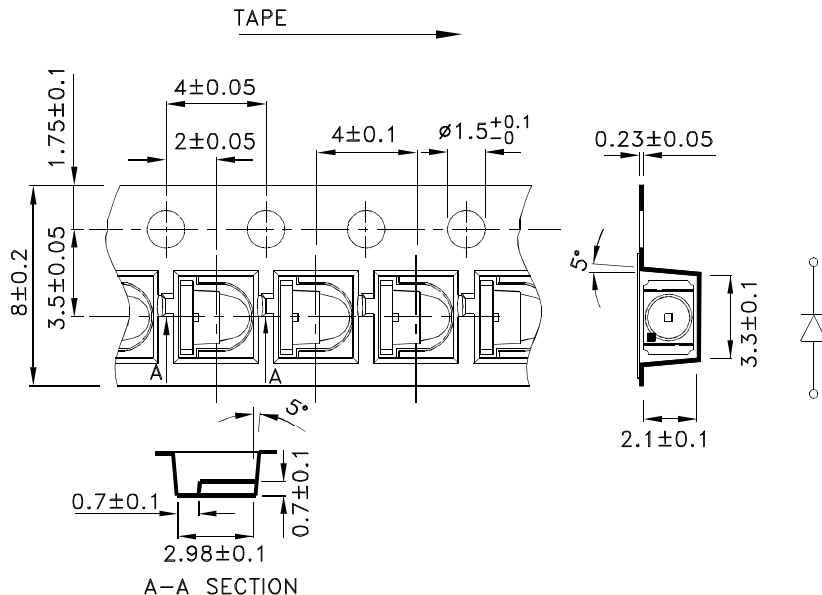
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



Reel Dimension



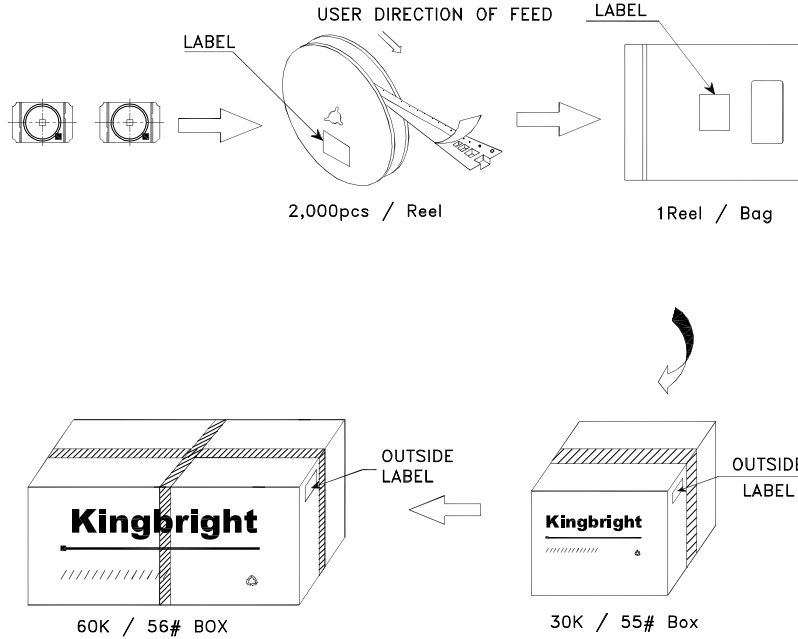
Tape Dimensions (Units : mm)




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PACKING & LABEL SPECIFICATIONS

APDA3020LSECK/J3-PF



<h1>Kingbright</h1>	
P/NO: APDA3020XXX	
QTY: 2,000 pcs	Q.C. Q C XX XX XXX PASSED
S/N: XXXX	
CODE: XXX	
LOT NO:	
 <small>xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx</small>	
RoHS Compliant	

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