

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

Part Number: APA2106EC High Efficiency Red

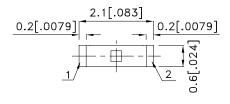
Features

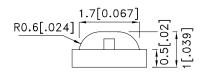
- 2.1mmX0.6mm right angle SMT LED, 1.0mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 3.
- Tinned pads for improved solderability.
- RoHS compliant.

Description

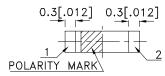
The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

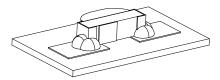
Package Dimensions











- 1. All dimensions are in millimeters (inches).
- 2.Tolerance is ±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





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Selection Guide

Part No.	Dice	Iv (mcd) [2] Lens Type @ 20mA			Viewing Angle [1]
		Min.	Тур.	201/2	
ADA0400EC	High Efficiency Red (GaAsP/GaP)	Matan Class	8	15	120°
APA2106EC		Water Clear	*3	*6	

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	High Efficiency Red	627		nm	IF=20mA
λD [1]	Dominant Wavelength	High Efficiency Red	617		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	High Efficiency Red	45		nm	IF=20mA
С	Capacitance	High Efficiency Red	15		pF	V _F =0V;f=1MHz
VF [2]	Forward Voltage	High Efficiency Red	2	2.5	V	IF=20mA
lr	Reverse Current	High Efficiency Red		10	uA	V _R =5V

Notes:

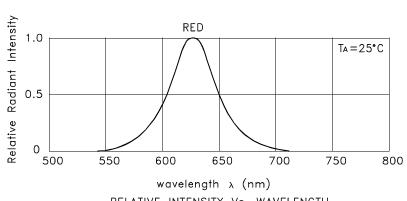
- 1. Wavelength: + / -1nm. 2. Forward Voltage: + / -0.1V.
- 3. Wavelength value is traceable to the CIE127-2007 compliant national standards.
- 4. Excess driving current and / or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

Absolute Maximum Ratings at TA=25°C

Parameter	High Efficiency Red		
Power dissipation	75	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	160	mA	
Reverse Voltage	5	V	
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

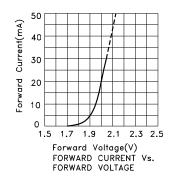
Note: 1. 1 / 10 Duty Cycle, 0.1ms Pulse Width.

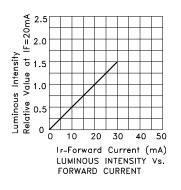
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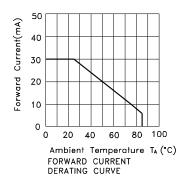


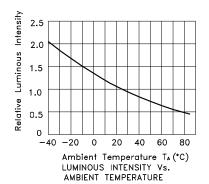
RELATIVE INTENSITY Vs. WAVELENGTH

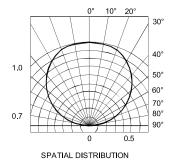
High Efficiency Red APA2106EC









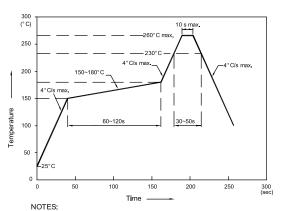


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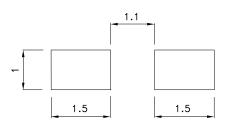
Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.



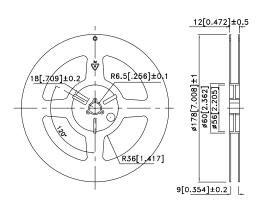
- 1.We recommend the reflow temperature 245°C(+/-5°C).The maximum soldering temperature should be limited to 260°C.
- 2. Don't cause stress to the epoxy resin while it is exposed $% \left(1\right) =\left(1\right) \left(1\right)$
- to high temperature.
 3.Number of reflow process shall be 2 times or less.

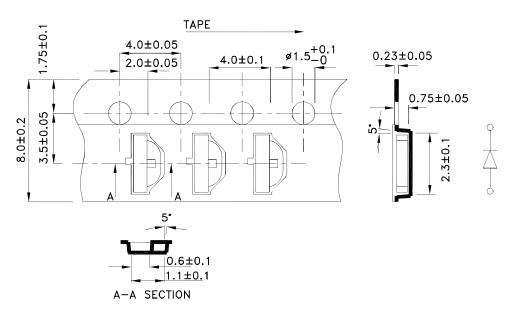
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



Tape Dimensions (Units: mm)

Reel Dimension

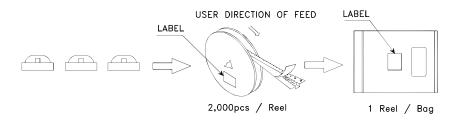


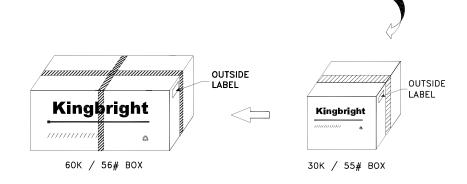


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PACKING & LABEL SPECIFICATIONS

APA2106EC







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