

3.2x1.6mm SMD CHIP LED LAMP

Part Number: AP3216EC

High Efficiency Red

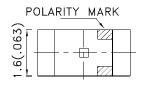
Features

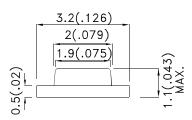
- 3.2mmx1.6mm SMT LED, 1.1mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Various colors and lens types available.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

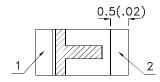
Description

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

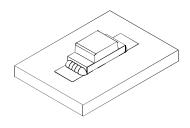
Package Dimensions











- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ±0.2(0.0079") 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: DSAD0978 **REV NO: V.9** DATE: JUN/09/2010 PAGE: 1 OF 5 CHECKED: Allen Liu APPROVED: WYNEC DRAWN: F.F.Zhou ERP: 1203000335

Selection Guide

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
		-	Min.	Тур.	201/2
AP3216EC	High Efficiency Red (GaAsP/GaP)	WATER CLEAR	4	15	120°

- Notes: 1. θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value. 2. Luminous intensity/ luminous Flux: +/-15%.

Electrical / Optical Characteristics at TA=25°C

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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	625		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	High Efficiency Red	45		nm	IF=20mA
С	Capacitance	High Efficiency Red	15		pF	VF=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

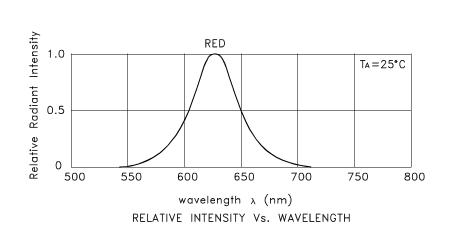
- Notes: 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

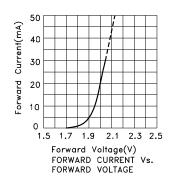
A Laborato Maximum Ratingo at 174 20 0						
Parameter	High Efficiency Red	Units				
Power dissipation	75	mW				
DC Forward Current	30	mA				
Peak Forward Current [1]	160	mA				
Reverse Voltage	5	V				
Operating Temperature	-40°C To +85°C					
Storage Temperature	-40°C To +85°C					

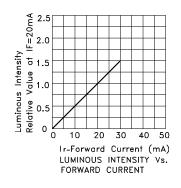
Note: 1. 1/10 Duty Cycle, 0.1ms Pulse Width.

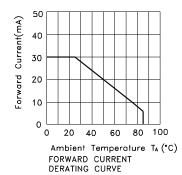
SPEC NO: DSAD0978 **REV NO: V.9** DATE: JUN/09/2010 PAGE: 2 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: F.F.Zhou ERP: 1203000335

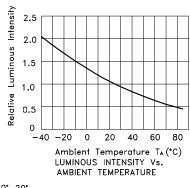


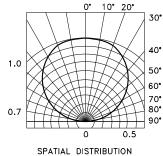
High Efficiency Red AP3216EC











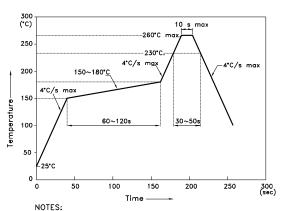
 SPEC NO: DSAD0978
 REV NO: V.9
 DATE: JUN/09/2010
 PAGE: 3 OF 5

 APPROVED: WYNEC
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AP3216EC

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.



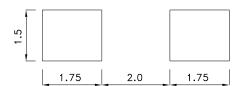
- NOTES:

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

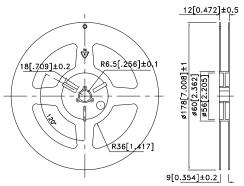
 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.
 - to high temperature.

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

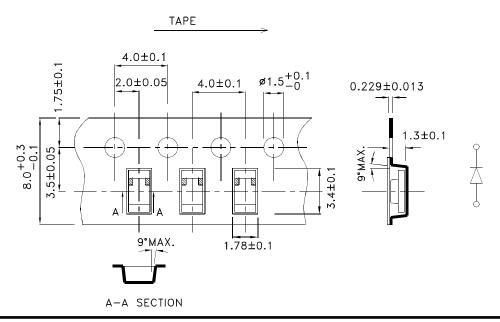
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



Reel Dimension

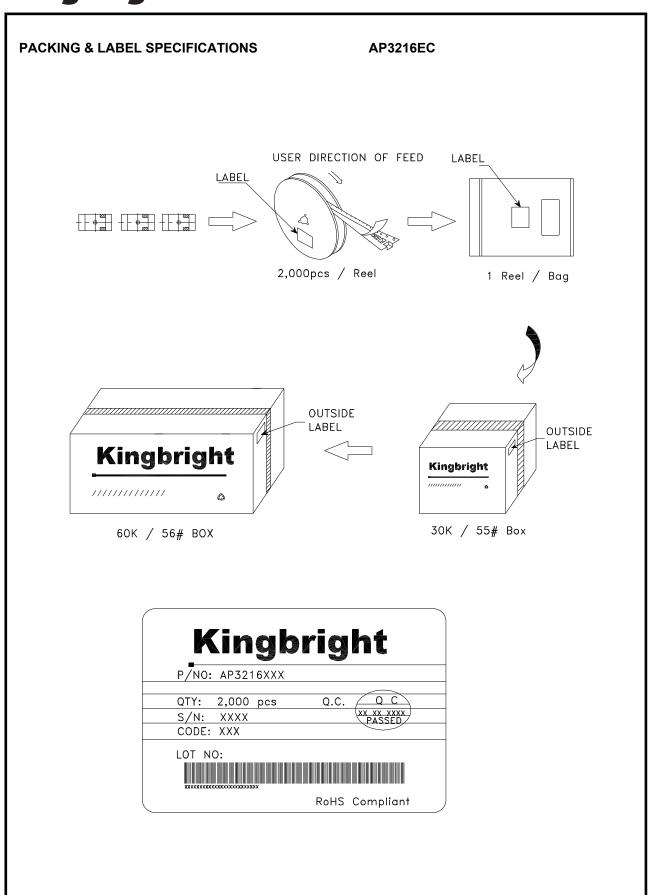


Tape Dimensions (Units: mm)



 SPEC NO: DSAD0978
 REV NO: V.9
 DATE: JUN/09/2010
 PAGE: 4 OF 5

 APPROVED: WYNEC
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SPEC NO: DSAD0978 APPROVED: WYNEC REV NO: V.9 CHECKED: Allen Liu DATE: JUN/09/2010 DRAWN: F.F.Zhou PAGE: 5 OF 5 ERP: 1203000335