

APA3010EC	HIGH EFFICIENCYRED
APA3010YC	YELLOW

### Features

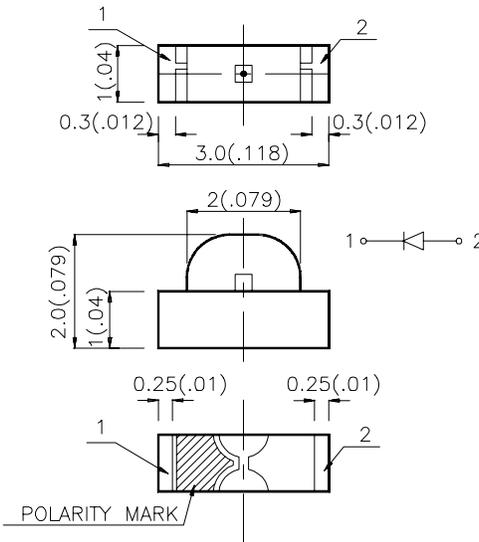
- 3.0mmx1.0mm SMT LED, 2.0mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.

### Description

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

The Yellow source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Yellow Light Emitting Diode.

### Package Dimensions



#### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.15(0.006)$  unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subject to change without notice.

## Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20 mA		Viewing Angle
			Min.	Typ.	θ1/2
APA3010EC	HIGH EFFICIENCY RED(GaAsP/GaP)	WATER CLEAR	5	12	120°
APA3010YC	YELLOW (GaAsP/GaP)	WATER CLEAR	3	5	120°

Note:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

## Electrical / Optical Characteristics at T<sub>A</sub>=25°C

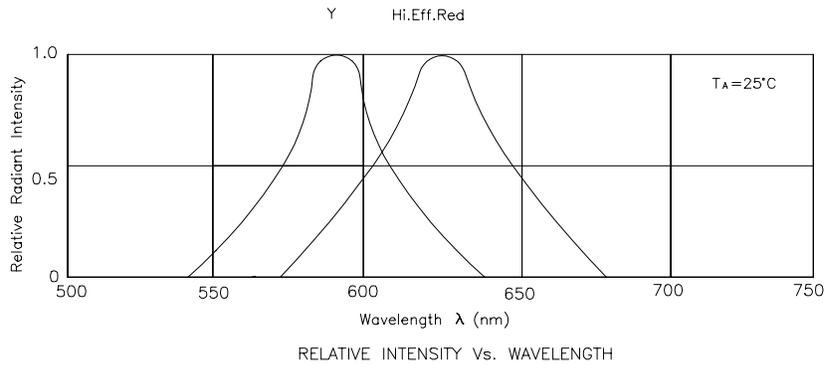
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ <sub>peak</sub>	Peak Wavelength	High Efficiency Red Yellow	627 590		nm	IF=20mA
λ <sub>D</sub>	Dominate Wavelength	High Efficiency Red Yellow	625 588		nm	IF=20mA
Δλ <sub>1/2</sub>	Spectral Line Halfwidth	High Efficiency Red Yellow	45 35		nm	IF=20mA
C	Capacitance	High Efficiency Red Yellow	15 20		pF	VF=0V;f=1MHz
V <sub>F</sub>	Forward Voltage	High Efficiency Red Yellow	2.0 2.1	2.5 2.5	V	IF=20mA
I <sub>r</sub>	Reverse Current	High Efficiency Red Yellow		10	μA	VR = 5V

## Absolute Maximum Ratings at T<sub>A</sub>=25°C

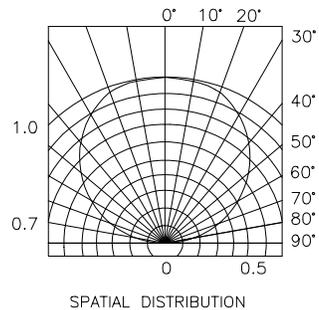
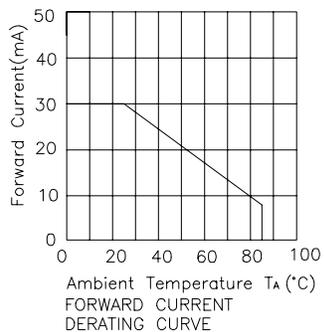
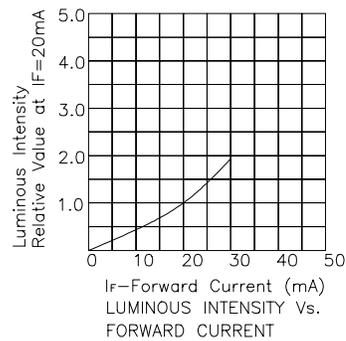
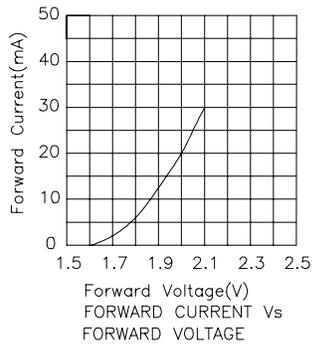
Parameter	High Efficiency Red	Yellow	Units
Power dissipation	105	105	mW
DC Forward Current	30	30	mA
Peak Forward Current [1]	160	140	mA
Reverse Voltage	5	5	V
Operating/Storage Temperature	-40°C To +85°C		

Note:

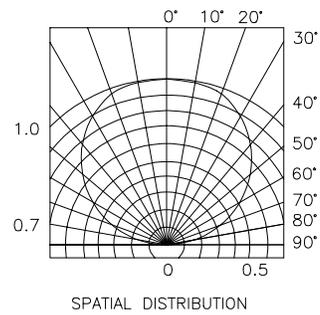
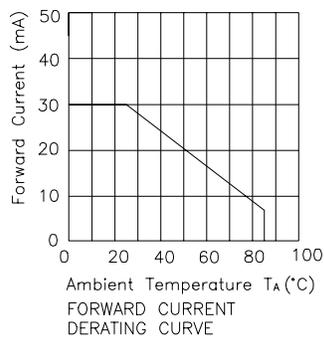
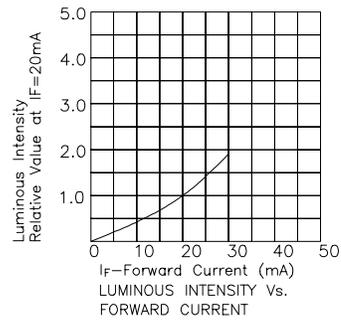
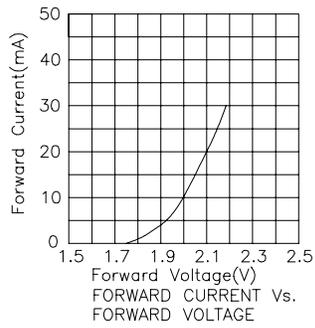
1. 1/10 Duty Cycle, 0.1ms Pulse Width.



## High Efficiency Red APA3010EC

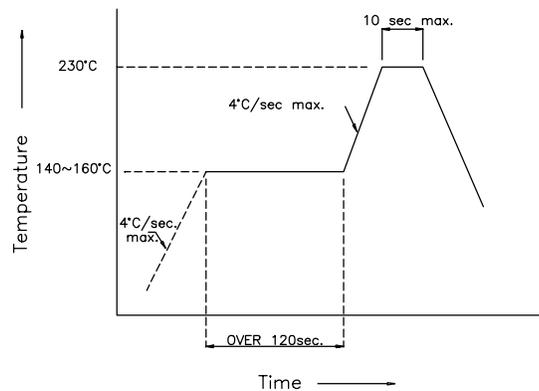


## Yellow APA3010YC

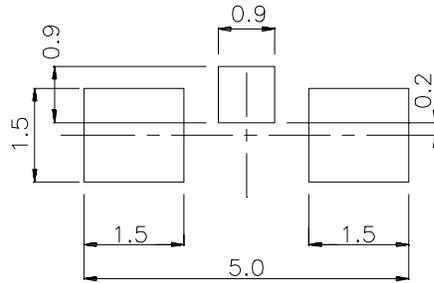


### APA3010EC, APA3010YC SMT Reflow Soldering Instructions

Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and second soldering process.



## Recommended Soldering Pattern (Units : mm)



## Tape Specifications (Units : mm)

