

## 1.6x0.6mm RIGHT ANGLE SMD CHIP LED **LAMP**

Part Number: APA1606CGCK Green

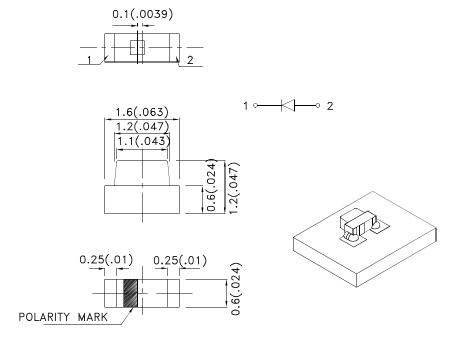
## **Features**

- 1.6mmx0.6mm right angle SMT LED,1.2mm 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 Green source color devices are made with AlGaInP on GaAs substrate Light Emitting Diode.

## **Package Dimensions**



- 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.





SPEC NO: DSAB7071 **REV NO: V.9** DATE: MAR/07/2011 PAGE: 1 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: J.Yu ERP: 1203000448

## **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
		,	Min.	Тур.	201/2
APA1606CGCK	Green (AlGaInP)	Water Clear	40	60	110°

- 1. θ1/2 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

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Green	574		nm	IF=20mA
λD [1]	Dominant Wavelength	Green	570		nm	I=20mA
Δλ1/2	Spectral Line Half-width	Green	20		nm	IF=20mA
С	Capacitance	Green	15		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Green	2.1	2.5	V	I=20mA
lR	Reverse Current	Green		10	uA	V <sub>R</sub> =5V

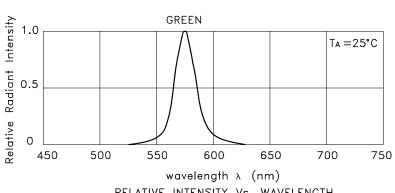
- 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

## Absolute Maximum Ratings at TA=25°C

Parameter	Green	Units		
Power dissipation	75	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			

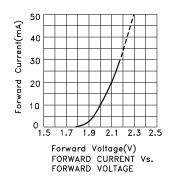
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

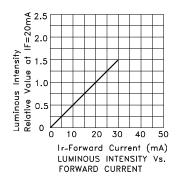
SPEC NO: DSAB7071 **REV NO: V.9** DATE: MAR/07/2011 PAGE: 2 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: J.Yu ERP: 1203000448

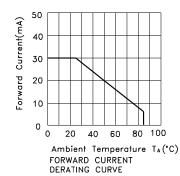


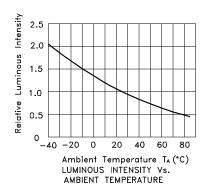
RELATIVE INTENSITY Vs. WAVELENGTH

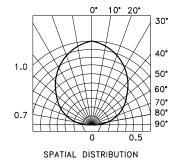
### Green APA1606CGCK









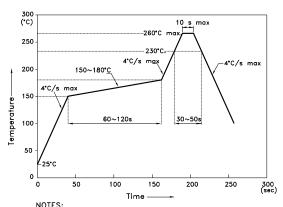


SPEC NO: DSAB7071 **REV NO: V.9** DATE: MAR/07/2011 PAGE: 3 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: J.Yu ERP: 1203000448

## APA1606CGCK

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.

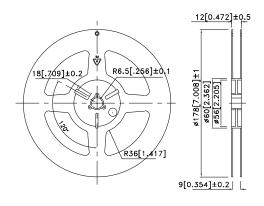
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)

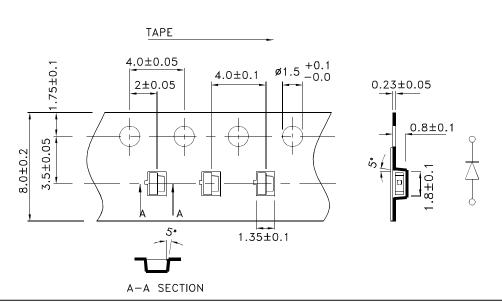
# 0.9 0.9

# Tape Dimensions

(Units: mm)

## **Reel Dimension**

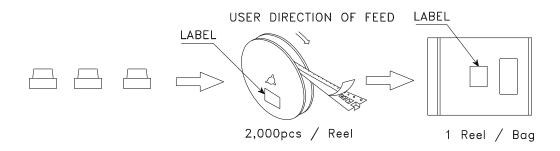


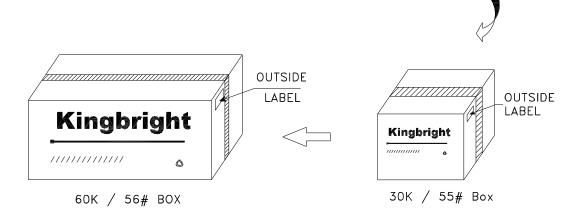


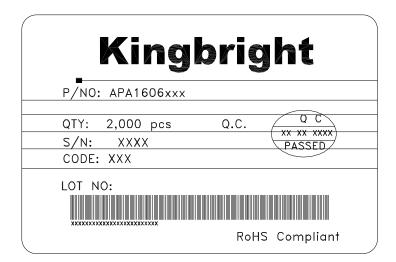
SPEC NO: DSAB7071 REV NO: V.9 DATE: MAR/07/2011 PAGE: 4 OF 5
APPROVED: WYNEC CHECKED: Allen Liu DRAWN: J.Yu ERP: 1203000448

## **PACKING & LABEL SPECIFICATIONS**

## APA1606CGCK







SPEC NO: DSAB7071 APPROVED: WYNEC

**REV NO: V.9 CHECKED: Allen Liu**  DATE: MAR/07/2011 DRAWN: J.Yu

PAGE: 5 OF 5 ERP: 1203000448