

### 3.5x2.8mm SURFACE MOUNT LED LAMP

Part Number: AA3528ACGCK Green

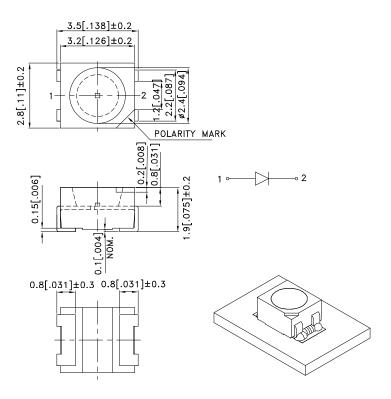
### **Features**

- Single color.
- Suitable for all SMT assembly and solder process.
- Available on tape and reel.
- Ideal for backlighting.
- Package: 1500pcs / reel.
- Moisture sensitivity level : level 4.
- 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  $\pm 0.25(0.01")$  unless otherwise noted.
- Specifications are subject to change without notice.
   The device has a single mounting surface. The device must be mounted according to the specifications.





SPEC NO: DSAH4232 **REV NO: V.4** DATE: MAR/30/2009 PAGE: 1 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: Ting.Li ERP: 1201003996

## **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Тур.	201/2
AA3528ACGCK	Green (AlGaInP)	WATER CLEAR	18	60	120°

- 1. 01/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline 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	IF=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	IF=20mA
lr	Reverse Current	Green		10	uA	VR=5V

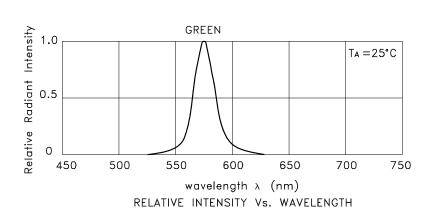
- 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

# 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			

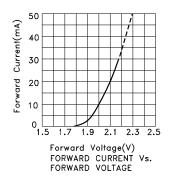
Note: 1. 1/10 Duty Cycle, 0.1ms Pulse Width.

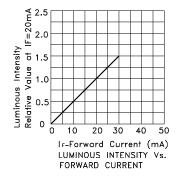
SPEC NO: DSAH4232 **REV NO: V.4** DATE: MAR/30/2009 PAGE: 2 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: Ting.Li ERP: 1201003996

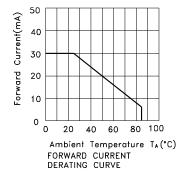


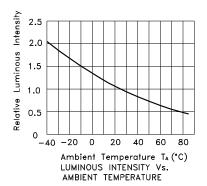
### Green

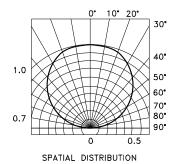
### AA3528ACGCK









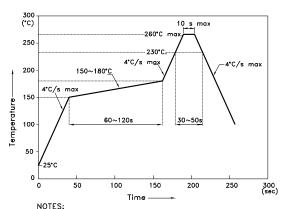


SPEC NO: DSAH4232 APPROVED: WYNEC REV NO: V.4 CHECKED: Allen Liu DATE: MAR/30/2009 DRAWN: Ting.Li PAGE: 3 OF 5 ERP: 1201003996

### AA3528ACGCK

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.



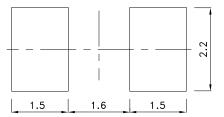
- NOTES:

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

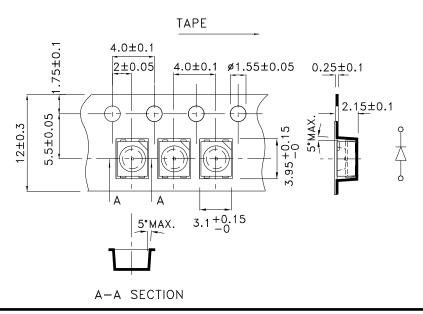
  2.Don't cause stress to the epoxy resin while it is exposed to high temperature. to high temperature.

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

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

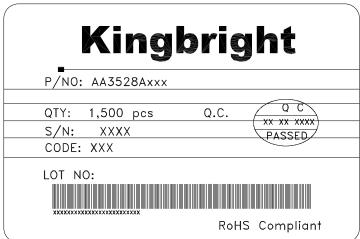


## **Tape Dimensions** (Units: mm)



DATE: MAR/30/2009 SPEC NO: DSAH4232 **REV NO: V.4** PAGE: 4 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: Ting.Li ERP: 1201003996

# **PACKING & LABEL SPECIFICATIONS** AA3528ACGCK USER DIRECTION OF FEED LABEL LABEL 1,500pcs / Reel 1 Reel / Bag OUTSIDE LABEL OUTSIDE LABEL Kingbright Kingbright 15K / 55# Box 30K / 56# BOX Kingbright



SPEC NO: DSAH4232 APPROVED: WYNEC REV NO: V.4 CHECKED: Allen Liu DATE: MAR/30/2009 DRAWN: Ting.Li PAGE: 5 OF 5 ERP: 1201003996