

### 3.0mmx1.0 mm RIGHT ANGLE SMD **CHIP LED LAMP**

Part Number: KPA-3010YC Yellow

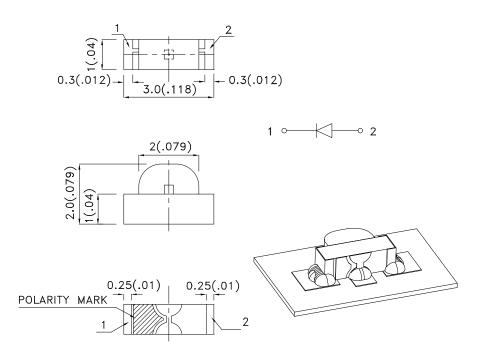
### **Features**

- 3.0mmx1.0mm right angle SMT LED, 2.0mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for back light and indicator.
- Various colors and lens types available.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 3.
- Tinned pads for improved solderability.
- RoHS compliant.

## Description

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

# **Package Dimensions**



SPEC NO: DSAB5287

APPROVED: WYNEC

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ±0.15(0.006") 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.

**REV NO: V.15B** DATE: MAY/03/2012 PAGE: 1 OF 5 CHECKED: Allen Liu DRAWN: F.Cui ERP: 1203000663

### **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
		7,1		Тур.	201/2
KPA-3010YC	Yellow (GaAsP/GaP)	Water Clear	3	6	120°

- 1.  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
- 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	Yellow	590		nm	IF=20mA
λD [1]	Dominant Wavelength	Yellow	588		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Yellow	35		nm	I=20mA
С	Capacitance	Yellow	20		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Yellow	2.1	2.5	V	IF=20mA
IR	Reverse Current	Yellow		10	uA	V <sub>R</sub> =5V

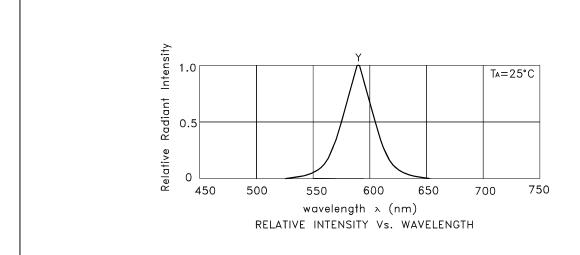
- 1.Wavelength: +/-1nm.
- Forward Voltage: +/-0.1V.
   Wavelength value is traceable to the CIE127-2007 compliant national standards.

# Absolute Maximum Ratings at TA=25°C

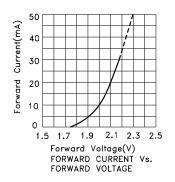
Parameter	Yellow	Units		
Power dissipation	75	mW		
DC Forward Current	30	mA		
Peak Forward Current [1]	140	mA		
Reverse Voltage	5	V		
Operating Temperature	-40°C To +85°C			
Storage Temperature	-40°C To +85°C			

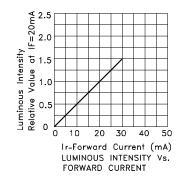
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

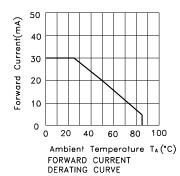
SPEC NO: DSAB5287 REV NO: V.15B DATE: MAY/03/2012 PAGE: 2 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: F.Cui ERP: 1203000663

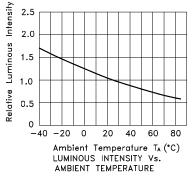


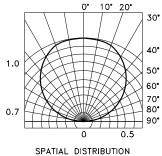
Yellow KPA-3010YC











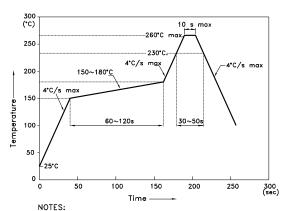
 SPEC NO: DSAB5287
 REV NO: V.15B
 DATE: MAY/03/2012
 PAGE: 3 OF 5

 APPROVED: WYNEC
 CHECKED: Allen Liu
 DRAWN: F.Cui
 ERP: 1203000663

### **KPA-3010YC**

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:

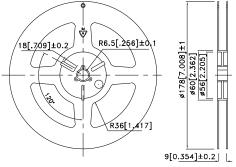
  1.We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.

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

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

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

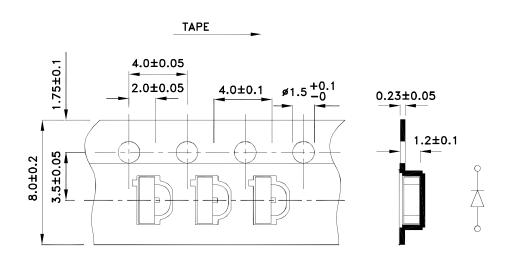
# 1.5 1.5 5.0



12[0.472]±0<u>.</u>5

**Reel Dimension** 

**Tape Dimensions** (Units: mm)



SPEC NO: DSAB5287 **REV NO: V.15B** DATE: MAY/03/2012 PAGE: 4 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: F.Cui ERP: 1203000663

# PACKING & LABEL SPECIFICATIONS USER DIRECTION OF FEED LABEL 2,000pcs / Reel 1 Reel / Bag OUTSIDE LABEL Kingbright Kingbright Kingbright



SPEC NO: DSAB5287 APPROVED: WYNEC REV NO: V.15B CHECKED: Allen Liu

60K / 56# BOX

DATE: MAY/03/2012 DRAWN: F.Cui

30K / 55# Box

PAGE: 5 OF 5 ERP: 1203000663