

#### 3.2x1.6mm SMD CHIP LED LAMP

KP-3216YC

YELLOW

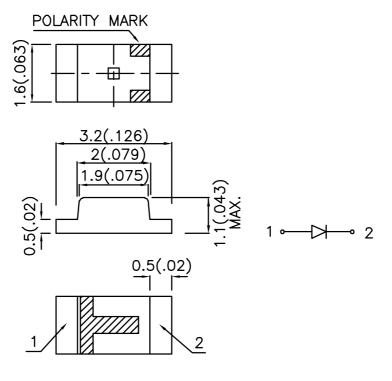
#### **Features**

- •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.
- •RoHS COMPLIANT.

#### **Description**

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

#### **Package Dimensions**



- 1. All dimensions are in millimeters (inches).
- Tolerance is ±0.2(0.0079") unless otherwise noted.
   Specifications are subject to change without notice.

SPEC NO: DSAB4106 APPROVED: J. Lu

**REV NO: V.5 CHECKED: Allen Liu**  DATE: MAR/18/2005 DRAWN: Y.CHENG

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#### **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) s Type @ 20mA		Viewing Angle
		,	Min.	Тур.	201/2
KP-3216YC	YELLOW (GaAsP/GaP)	WATER CLEAR	2.6	8	120°

Note:

### Electrical / Optical Characteristics at Ta=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Yellow	590		nm	IF=20mA
λD	Dominant Wavelength	Yellow	588		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Yellow	35		nm	IF=20mA
С	Capacitance	Yellow	20		pF	VF=0V;f=1MHz
VF	Forward Voltage	Yellow	2.1	2.5	V	IF=20mA
lR	Reverse Current	Yellow		10	uA	VR = 5V

#### Absolute Maximum Ratings at Ta=25°C

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

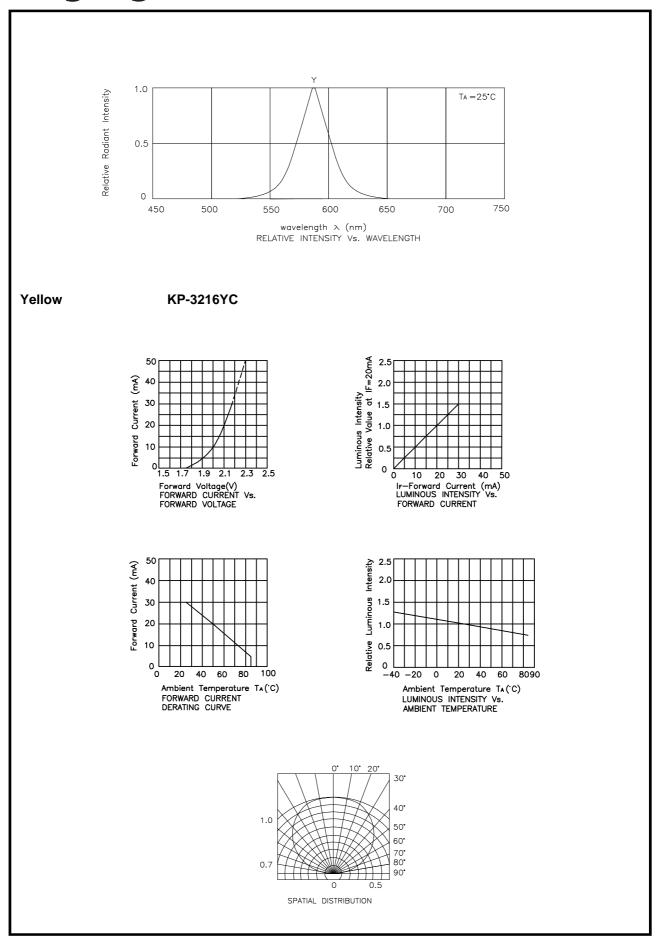
Note:

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<sup>1.</sup>  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

<sup>1. 1/10</sup> Duty Cycle, 0.1ms Pulse Width.

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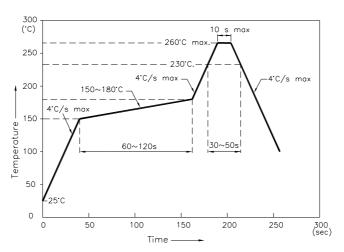
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#### **KP-3216YC**

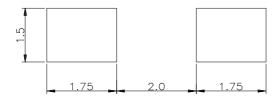
Reflow Soldering Profile For Lead-free SMT Process.



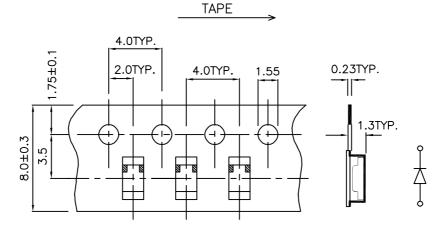
#### NOTES

- 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)



### Tape Specifications (Units: mm)



#### Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength), the typical accuracy of the sorting process is as follows:

- 1. Wavelength: +/-1nm
- 2. Luminous Intensity: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

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