



# YETDA INDUSTRY LTD.

## Technical Data Sheet

**MODEL NO : S3014ANWW4-H**

**3.0 x 1.4 x 0.8mm Warm White SMD**

### Features

- Package: 4000pcs per reel
- Compatible with automatic placement equipment
- Compatible with reflow solder process

### Applications :

- Indicators
- Automotive : backlighting in dashboard and switch

Dice material	Emitted color	Lens Color
InGaN	Warm White	Yellow diffused

### Electrical/Optical Characteristics(Ta=25°C)

Parameter	Test Condition	Symbol	Value			Unit
			Min	Typ	Max	
Luminous Flux	I <sub>F</sub> =40mA	$\phi$ (lm)	13		17	lm
Chromaticity Coordinates	I <sub>F</sub> =40mA	X	0.409		0.463	-
		Y	0.394		0.420	-
Color Temperature	I <sub>F</sub> =40mA	CCT	2600		2800	K
			2800		3100	
			3200		3600	
Color Rendering Index	I <sub>F</sub> =40mA	R <sub>a</sub>	80			-
Forward voltage	I <sub>F</sub> =40mA	V <sub>F</sub>	2.7		3.3	V
Viewing angle	I <sub>F</sub> =40mA	2 $\theta$ 1/2		120		Deg
Reverse current	V <sub>R</sub> =5V	I <sub>R</sub>			10	$\mu$ A

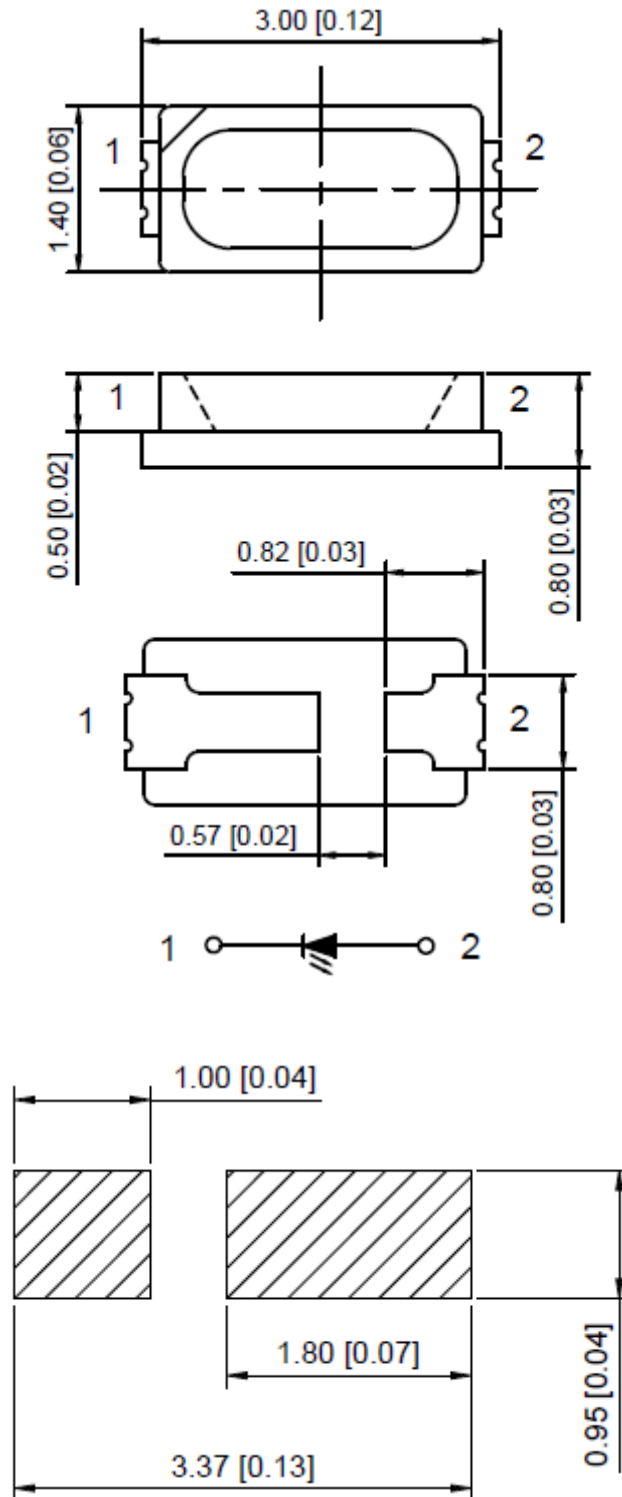
### Absolute Maximum Ratings(Ta=25°C)

Parameter	Symbol	Value	Unit
Power dissipation	P <sub>d</sub>	120	mW
Forward current	I <sub>F</sub>	40	mA
Reverse voltage	V <sub>R</sub>	5	V
Operating temperature range	T <sub>op</sub>	-40 ~+85	°C
Storage temperature range	T <sub>stg</sub>	-40 ~+100	°C
Peak pulsing current (1/10 duty f=1kHz)	I <sub>FP</sub>	100	mA



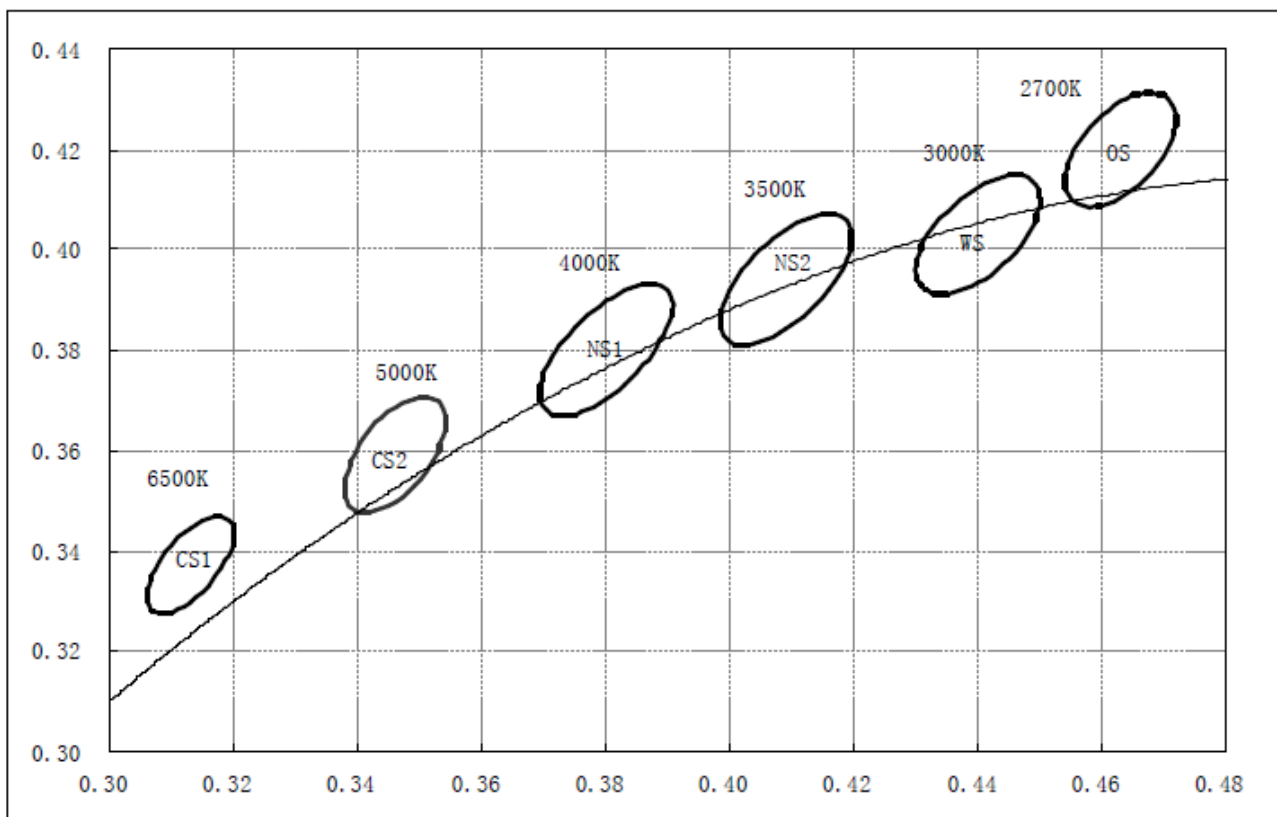
YETDA INDUSTRY LTD.

PACKAGING DIMENSIONS (mm):





# YETDA INDUSTRY LTD.



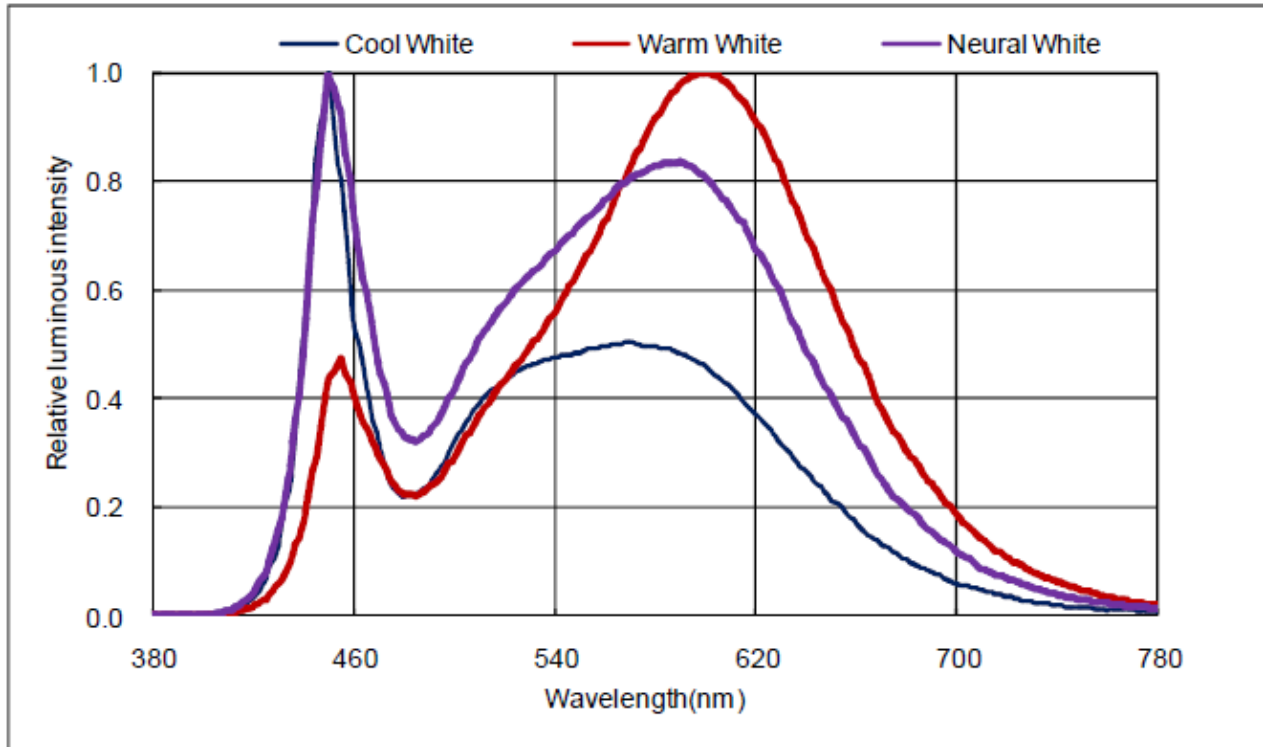
## Bin Range of Chromaticity

CCT 色温	Bin Code Bin代码	CIE_x	CIE_y
6500K	CS1 6000-7000K	0.313	0.337
5000K	CS2 4750-5300K	0.346	0.359
4000K	NS1 3800-4250K	0.380	0.380
3400K	NS2 3200-3600K	0.409	0.394
3000K	WS 2800-3100K	0.440	0.403
2700K	OS 2600-2800K	0.463	0.420

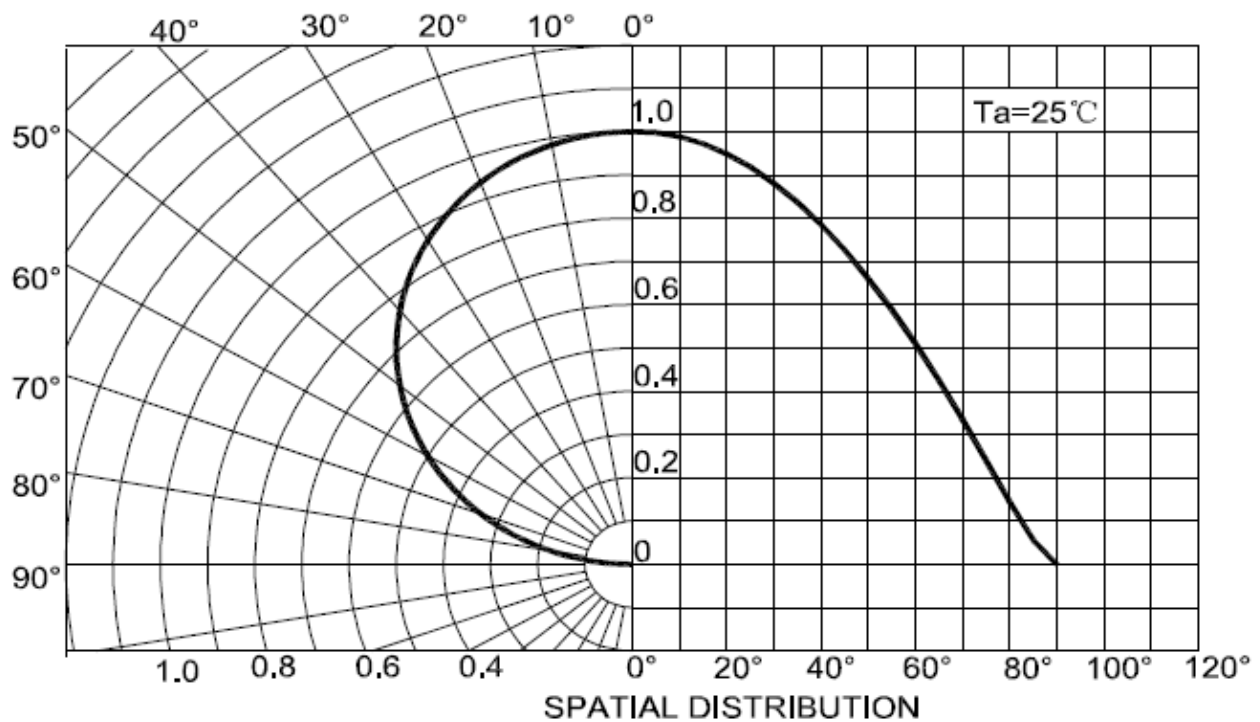


# YETDA INDUSTRY LTD.

Relative spectral emission



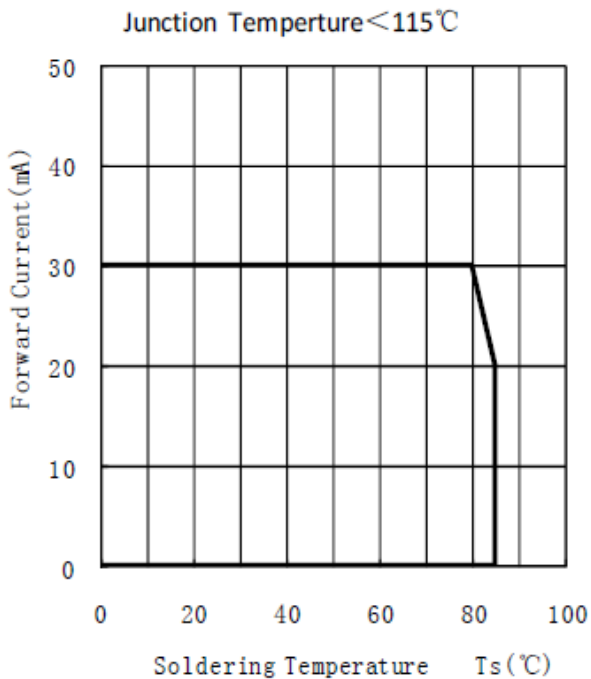
Radiation diagram



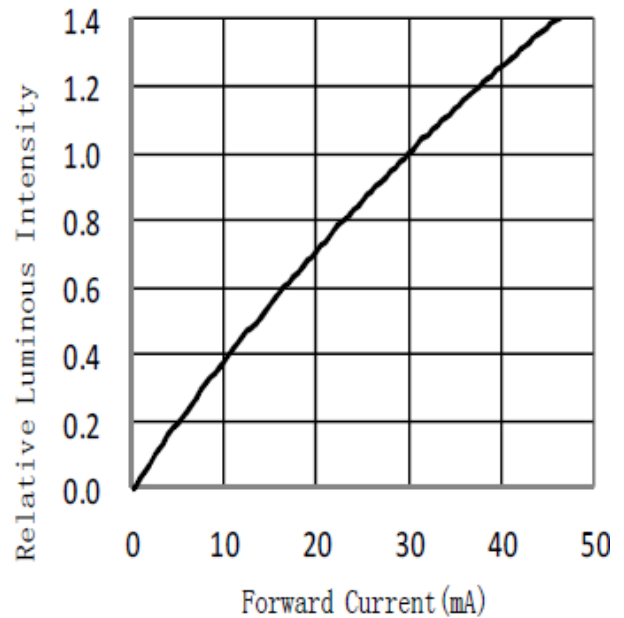


# YETDA INDUSTRY LTD.

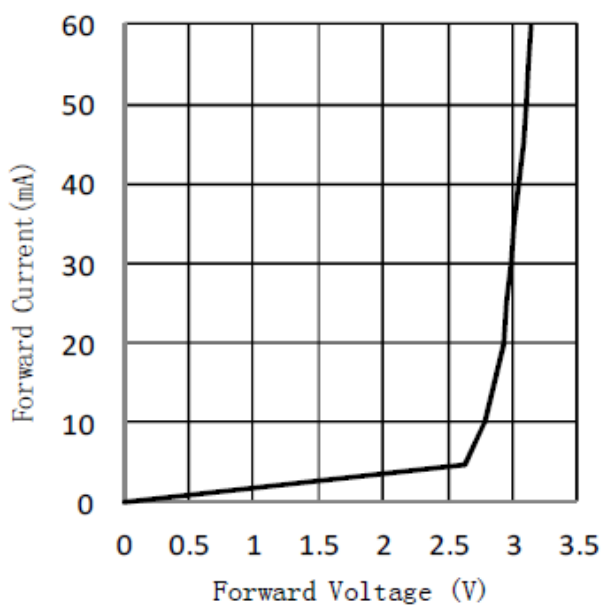
Soldering Temperature vs. Forward Current  
焊盘温度与正向电流特性曲线



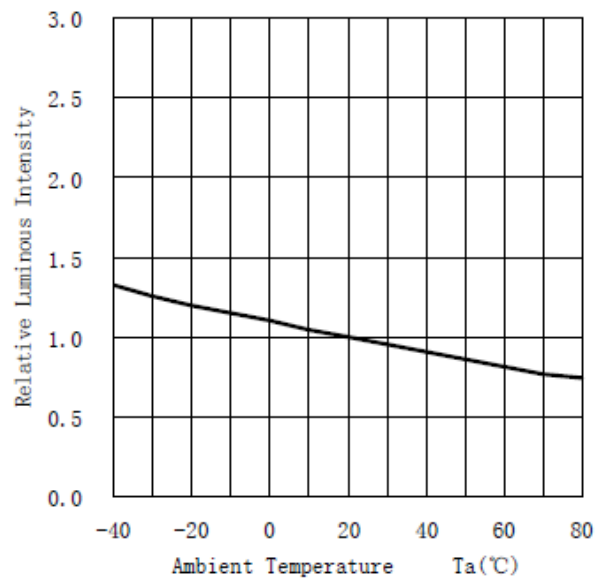
Forward Current VS. Relative Intensity  
正向电流与相对光强特性曲线



Forward Voltage VS. Forward Current  
正向电压与正向电流特性曲线



Ambient Temperature VS. Relative Intensity  
环境温度与相对光强特性曲线

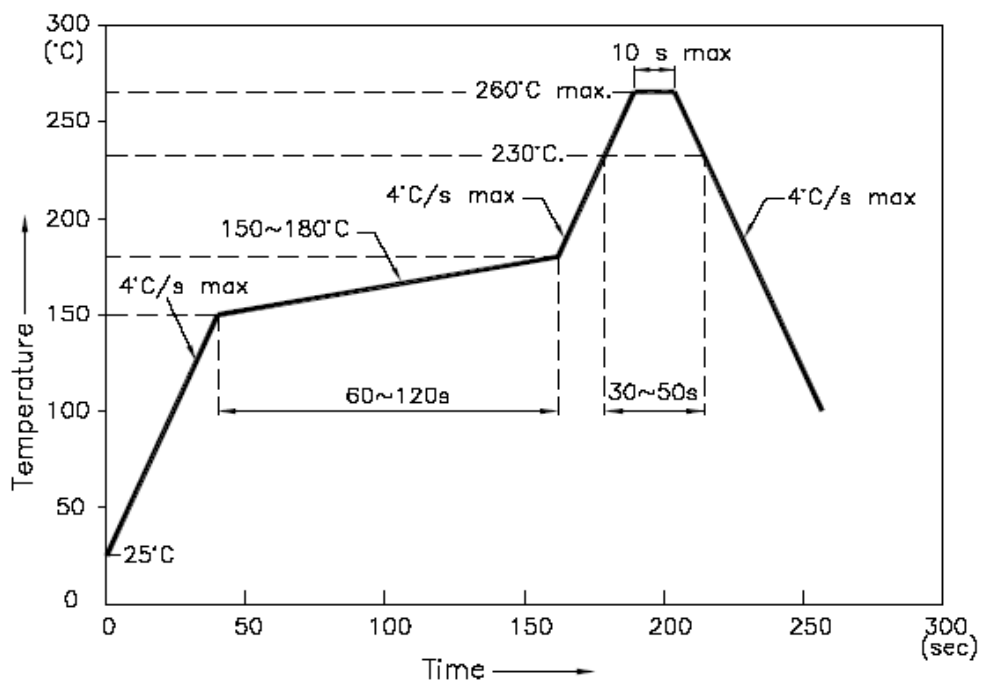




# YETDA INDUSTRY LTD.

<b>Precautions For Use :</b>
<b>Over - current - proof</b>
Customer must apply resistors for protection, otherwise slight voltage shift will cause big current change ( Burn out will happen )
<b>Storage</b>
1. The operation of temperature and R.H. are : $5^{\circ}\text{C} \sim 30^{\circ}\text{C}$ , 60%R.H. Max.
2. Once the package is opened, the products should be used within a week. Otherwise, they should be kept in a dampproof box with desiccating reagent. Considering the tape life, we suggest our customers to use our products within 1.5 year ( from production date ) .
3. It's recommended to bake before soldering when the package is unsealed after 72 hrs. The condition is : $60^{\circ}\text{C} \pm 5^{\circ}\text{C}$ for 15hrs.

## ■ Reflow Temp/Time



### NOTES:

1. We recommend the reflow temperature  $245^{\circ}\text{C} (\pm 5^{\circ}\text{C})$ . the maximum soldering temperature should be limited to  $260^{\circ}\text{C}$ .
2. dont cause stress to the epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.



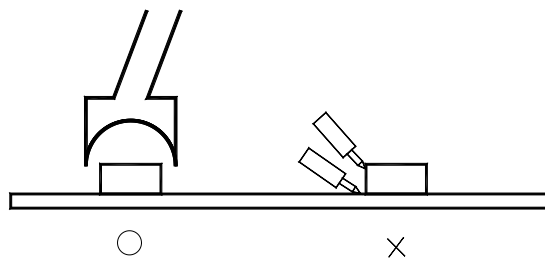
# YETDA INDUSTRY LTD.

## ■Soldering iron

Basic spec is  $\leq 5\text{sec}$  when  $260^{\circ}\text{C}$ . If temperature is higher, time should be shorter ( $+10^{\circ}\text{C} \rightarrow -1\text{sec}$ ). Power dissipation of iron should be smaller than 20W, and temperatures should be controllable. Surface temperature of the device should be under  $230^{\circ}\text{C}$ .

## ■Rework

1. Customer must finish rework within 5 sec under  $260^{\circ}\text{C}$ .
2. The head of iron can not touch copper foil
3. Twin-head type is preferred.



- Avoid rubbing or scraping the resin by any object, during high temperature, for example reflow 、 solder etc.