



YETDA INDUSTRY LTD.

Technical Data Sheet

MODEL NO : S3014ANW4-H-5000k

3.0 x 1.4 x 0.8mm Pure 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	Pure White	Yellow diffused

Electrical/Optical Characteristics(Ta=25°C)

Parameter	Test Condition	Symbol	Value			Unit
			Min	Typ	Max	
Luminous Flux	I _F =40mA	ϕ (lm)	15		17	lm
Chromaticity Coordinates	I _F =40mA	X		0.346		-
		Y		0.359		-
Color Temperature	I _F =40mA	CCT	4750	5000	5300	K
Color Rendering Index	I _F =40mA	Ra	80			-
Forward voltage	I _F =40mA	V _F	2.7		3.3	V
Viewing angle	I _F =40mA	2 θ 1/2		120		Deg
Reverse current	V _R =5V	I _R			10	μ A

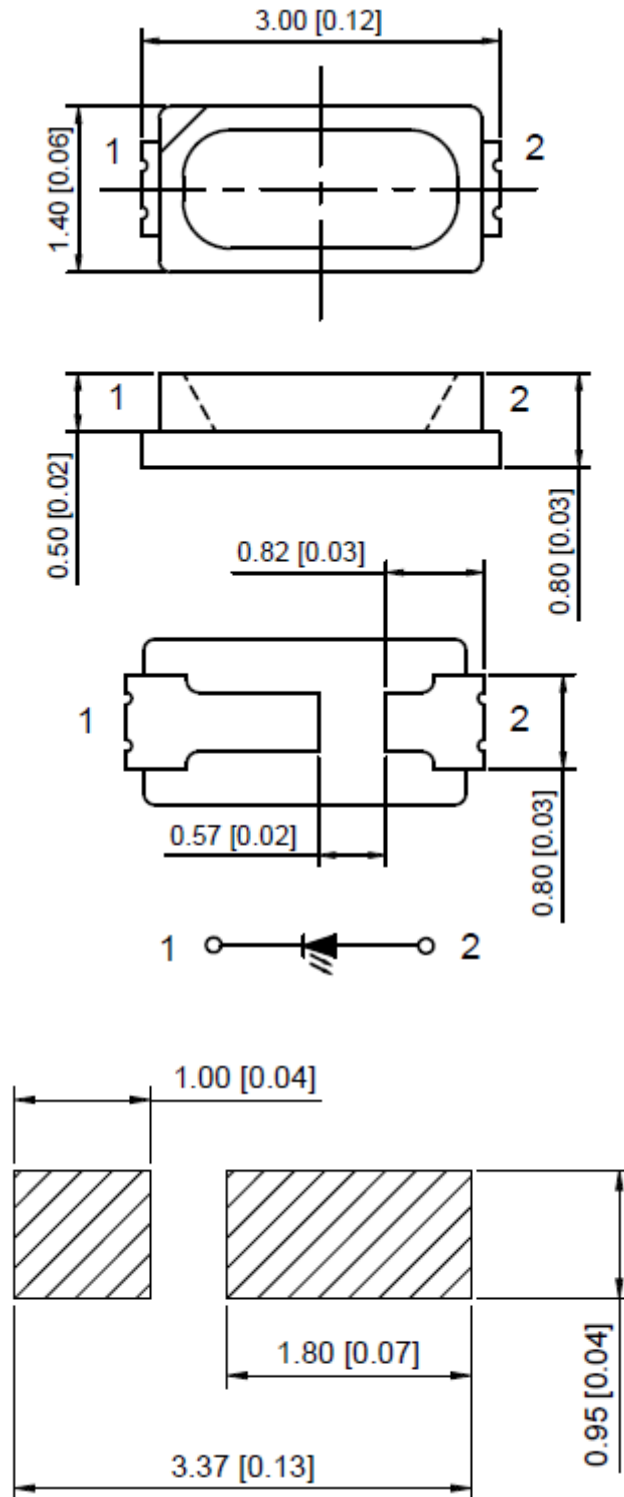
Absolute Maximum Ratings(Ta=25°C)

Parameter	Symbol	Value	Unit
Power dissipation	P _d	120	mW
Forward current	I _F	40	mA
Reverse voltage	V _R	5	V
Operating temperature range	T _{op}	-40 ~+85	°C
Storage temperature range	T _{stg}	-40 ~+100	°C
Peak pulsing current (1/10 duty f=1kHz)	I _{FP}	100	mA



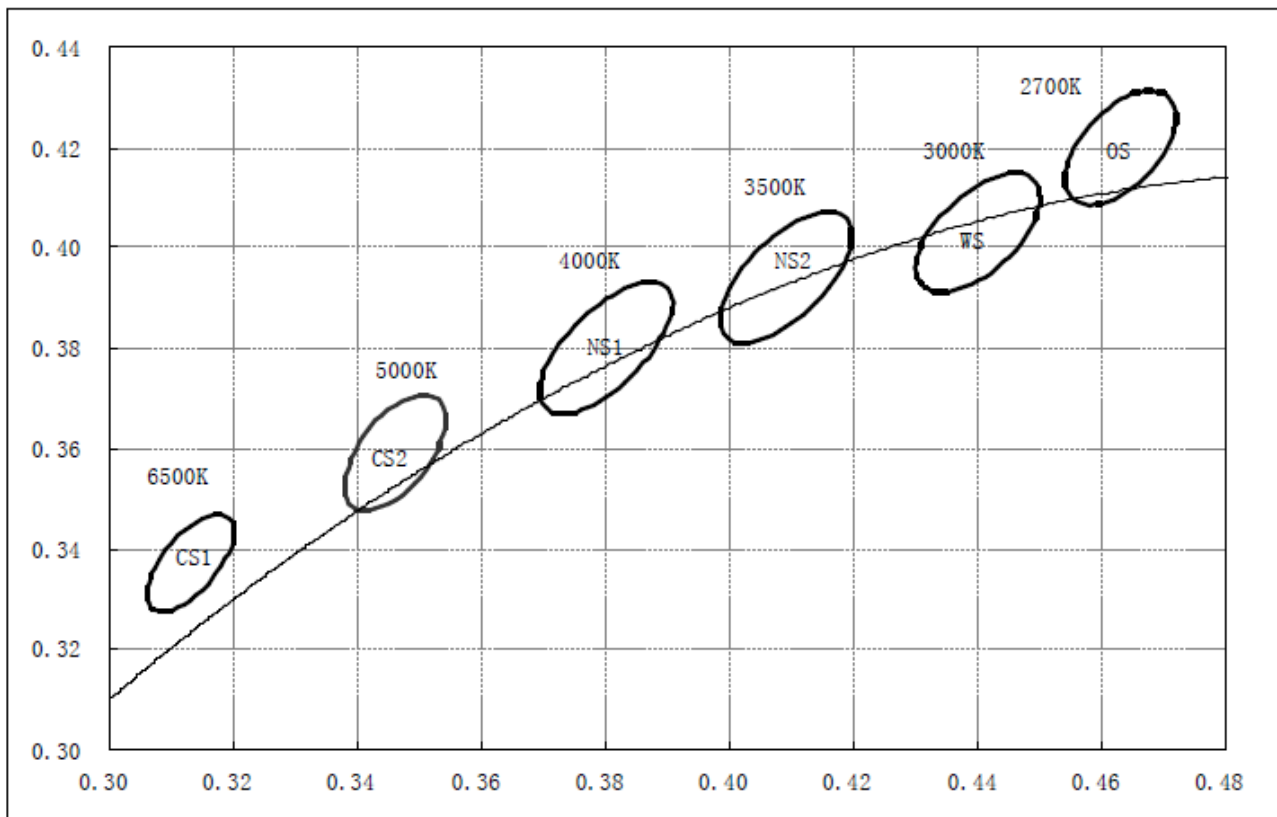
YETDA INDUSTRY LTD.

PACKAGING DIMENSIONS (mm):





YETDA INDUSTRY LTD.



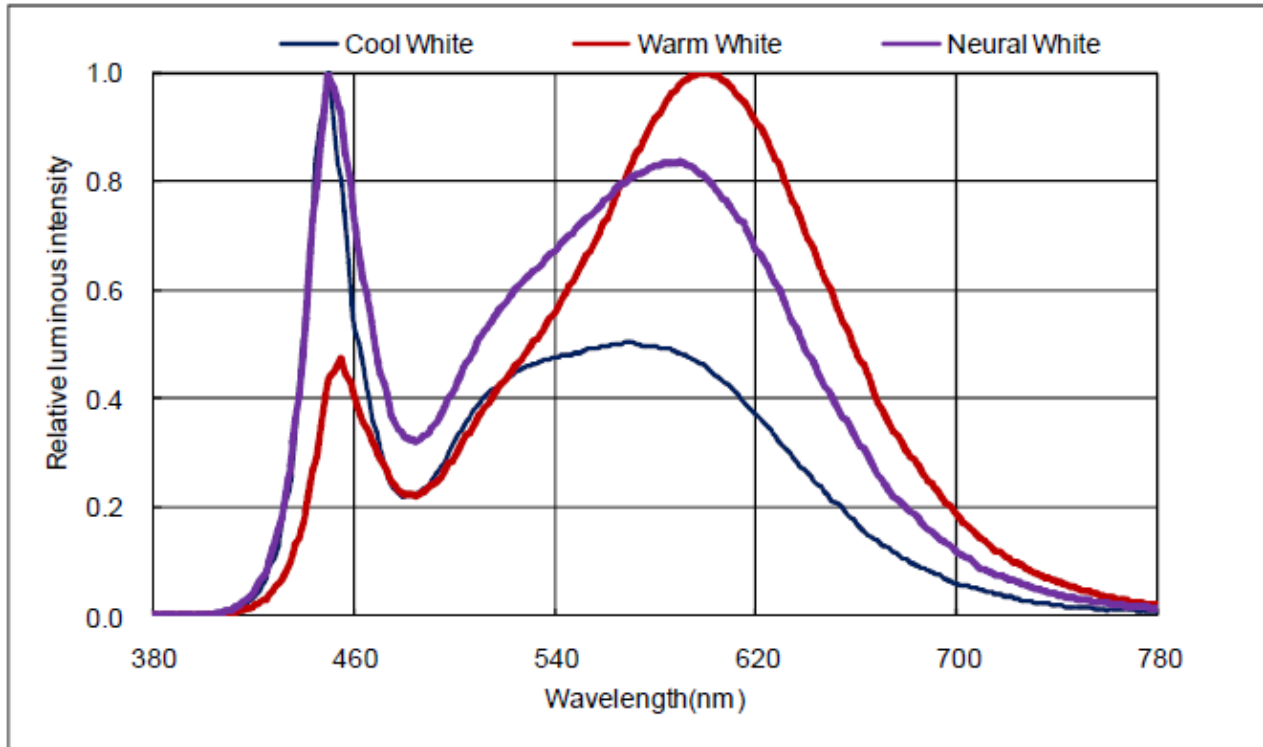
Bin Range of Chromaticity

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

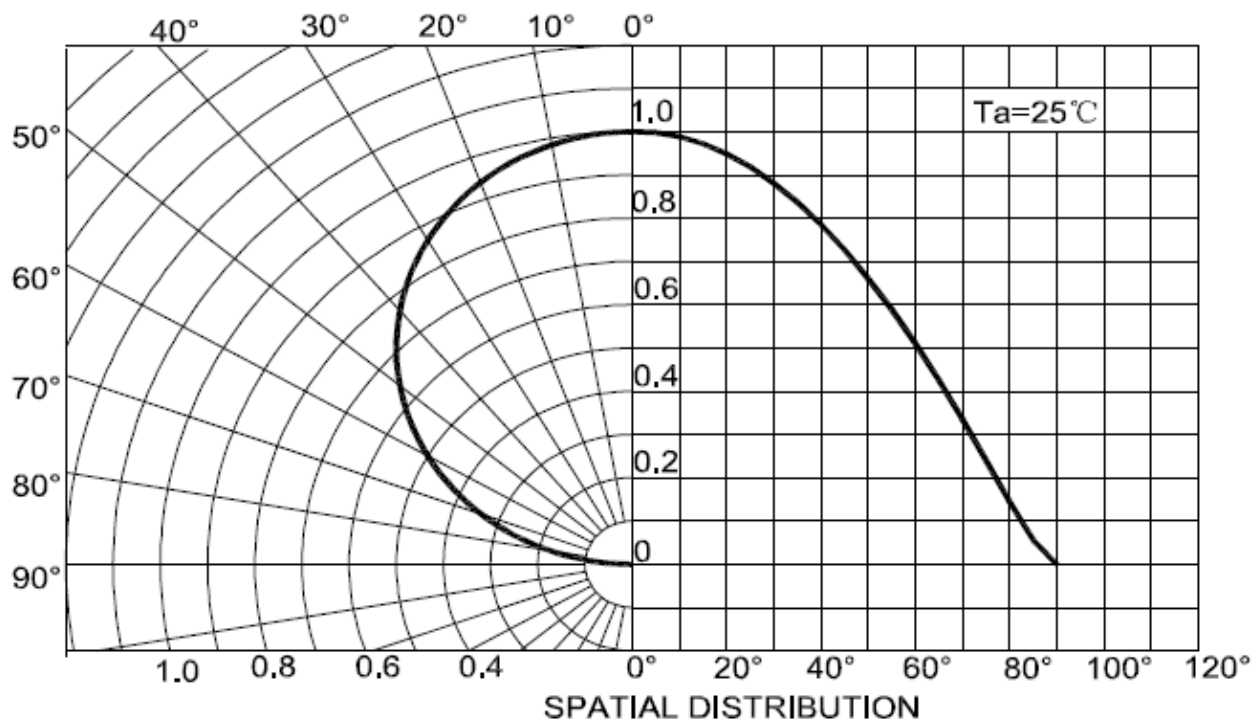


YETDA INDUSTRY LTD.

Relative spectral emission



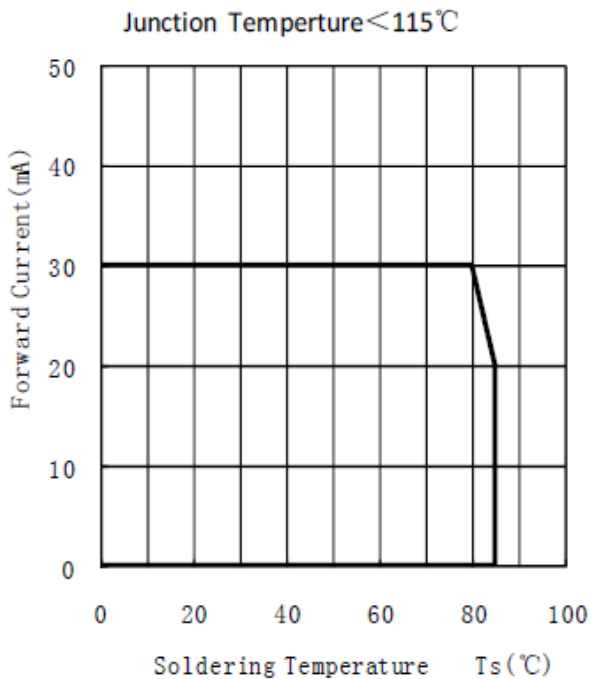
Radiation diagram



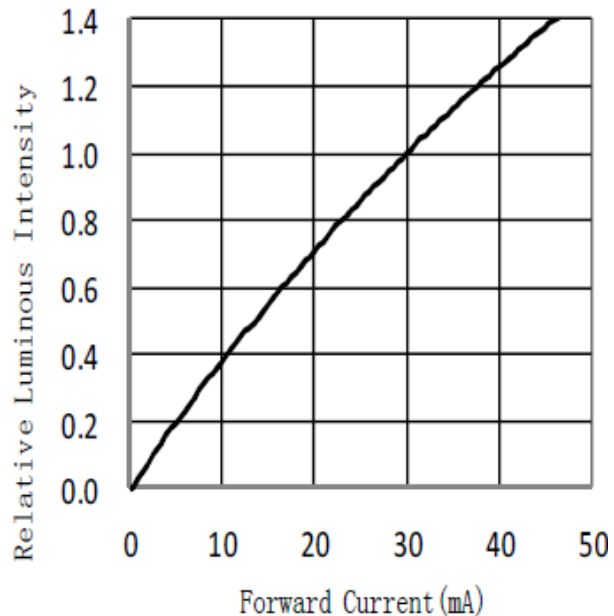


YETDA INDUSTRY LTD.

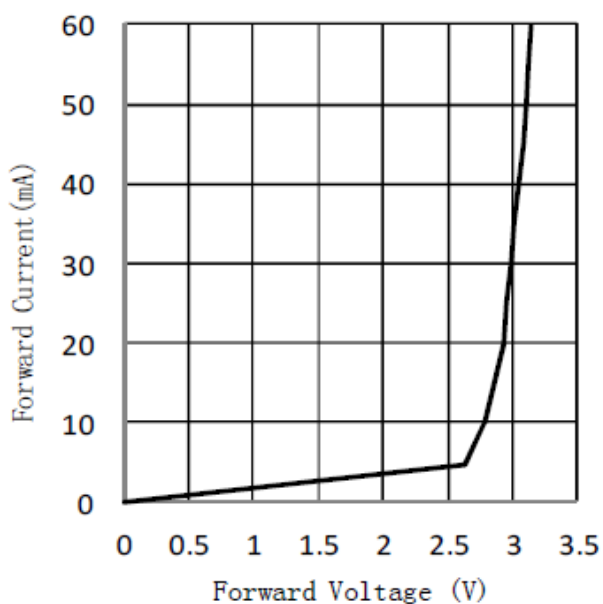
Soldering Temperature vs. Forward Current
焊盘温度与正向电流特性曲线



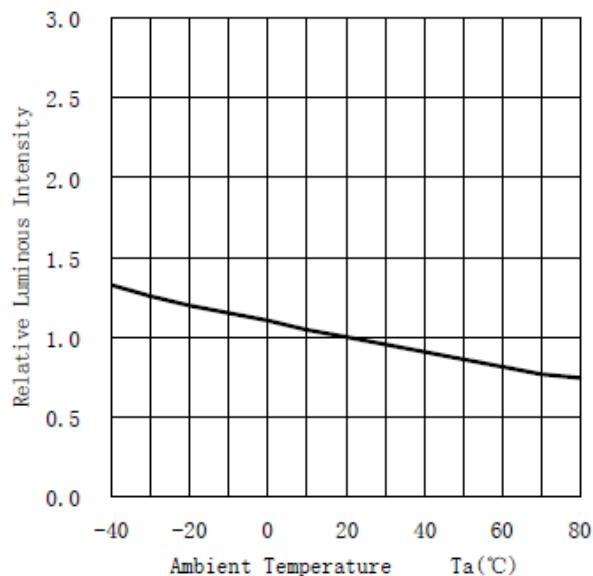
Forward Current VS. Relative Intensity
正向电流与相对光强特性曲线



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

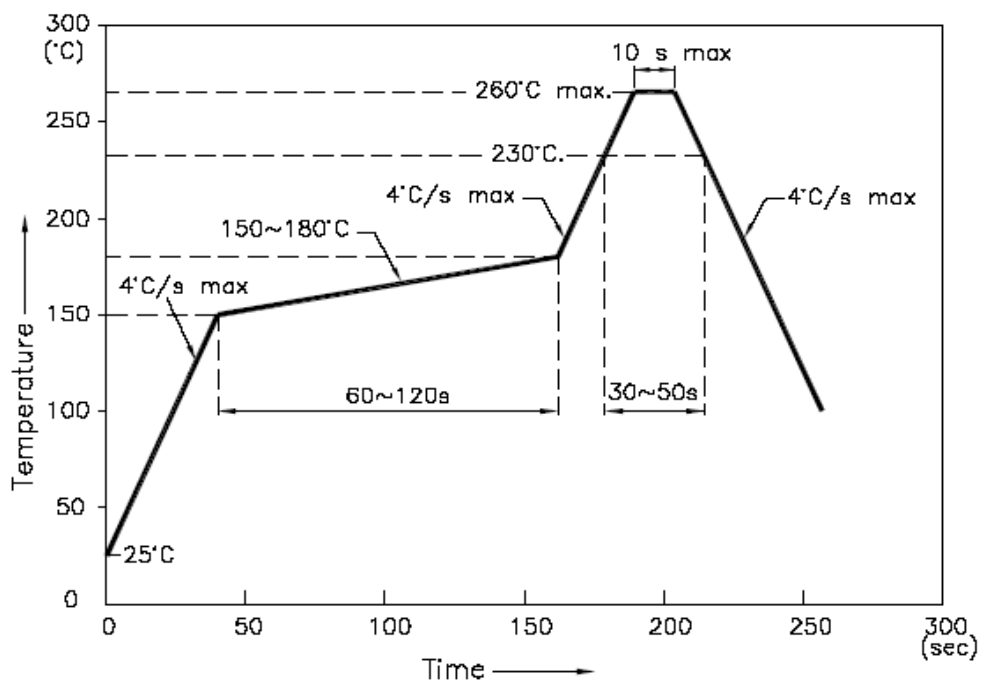




YETDA INDUSTRY LTD.

Precautions For Use :
Over - current - proof
Customer must apply resistors for protection, otherwise slight voltage shift will cause big current change (Burn out will happen)
Storage
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°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.



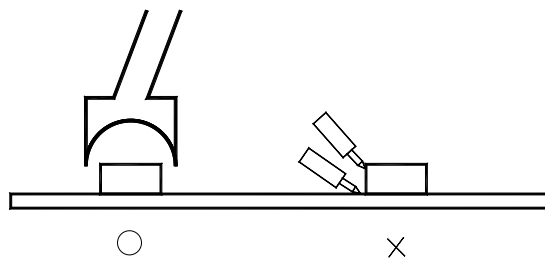
YETDA INDUSTRY LTD.

■Soldering iron

Basic spec is $\leq 5\text{sec}$ when 260°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°C .

■Rework

1. Customer must finish rework within 5 sec under 260°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.