



# YETDA INDUSTRY LTD.

## Technical Data Sheet

**MODEL NO : S776ANX4P**

**2835 WHITE SMD**

### Features

- Package: 3000pcs per reel
- Compatible with automatic placement equipment
- Compatible with reflow solder process

### Applications :

- Indicators
- Automotive : backlighting in dashboard and switch

Part Number	Dice material	Emitted color	Lens Color
<b>S776ANW4P</b>	InGaN	White	Yellow diffused
<b>S776ANPW4P</b>		Pure-White	
<b>S776ANWW4P</b>		Warm White	

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

Parameter	Test Condition	Symbol	Value			Unit
			Min	Typ	Max	
Luminous Flux (Cool White)	I <sub>F</sub> =60mA	φ (lm)		22		lm
Luminous Flux (Pure White)	I <sub>F</sub> =60mA	φ (lm)		22		lm
Luminous Flux (Warm White)	I <sub>F</sub> =60mA	φ (lm)		20		lm
Luminous Intensity (Cool White)	I <sub>F</sub> =60mA	I <sub>v</sub>	7300		12000	mcd
Luminous Intensity (Pure White)	I <sub>F</sub> =60mA	I <sub>v</sub>	7300		12000	mcd
Luminous Intensity (Warm White)	I <sub>F</sub> =60mA	I <sub>v</sub>	6100		9000	mcd
Color Temperature (Cool White)	I <sub>F</sub> =60mA	CCT		7000		K
Color Temperature (Pure White)	I <sub>F</sub> =60mA	CCT		4000		K
Color Temperature (Warm White)	I <sub>F</sub> =60mA	CCT		3000		K
Color Rendering Index	I <sub>F</sub> =60mA	R <sub>a</sub>	80			-
Forward voltage	I <sub>F</sub> =60mA	V <sub>F</sub>	2.8		3.6	V
Viewing angle	I <sub>F</sub> =60mA	2θ 1/2		120		Deg
Reverse current	V <sub>R</sub> =5V	I <sub>R</sub>			10	μA

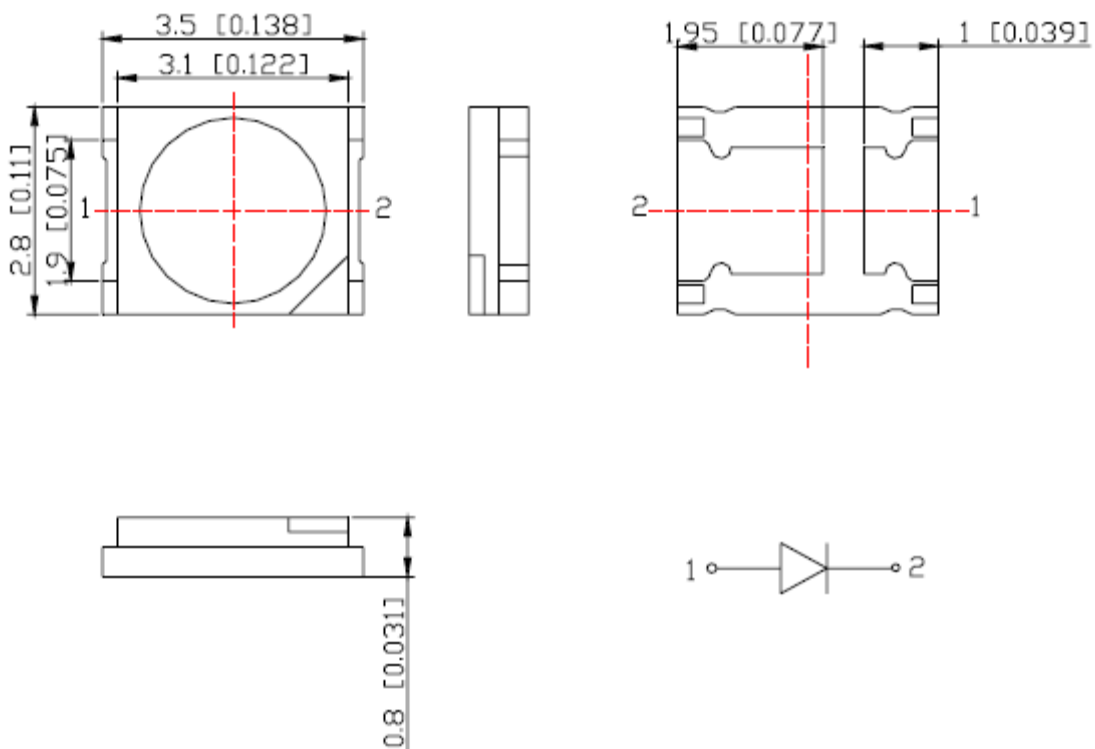


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Absolute Maximum Ratings( $T_a=25^{\circ}\text{C}$ )

Parameter	Symbol	Value	Unit
Power dissipation	$P_d$	200	mW
Forward current	$I_F$	60	mA
Reverse voltage	$V_R$	5	V
Operating temperature range	$T_{op}$	-40 ~ +85	$^{\circ}\text{C}$
Storage temperature range	$T_{stg}$	-40 ~ +100	$^{\circ}\text{C}$
Peak pulsing current (1/10 duty $f=1\text{kHz}$ )	$I_{FP}$	120	mA

PACKAGING DIMENSIONS (mm):

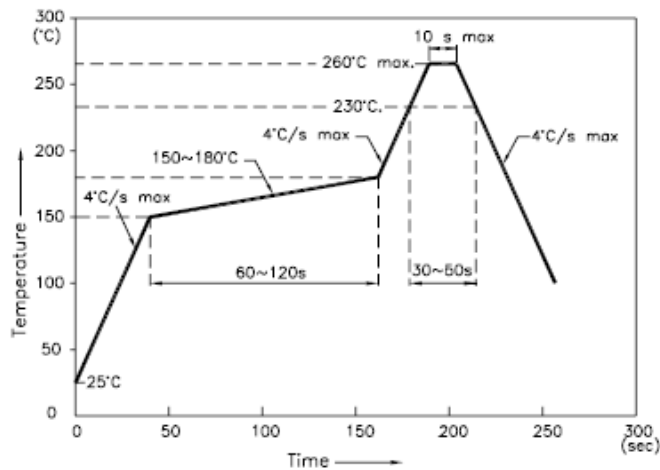




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## ◆ Soldering Profile

Reflow Soldering Profile For Lead-free SMT Process.

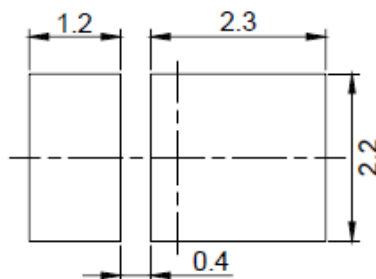


NOTES:

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.

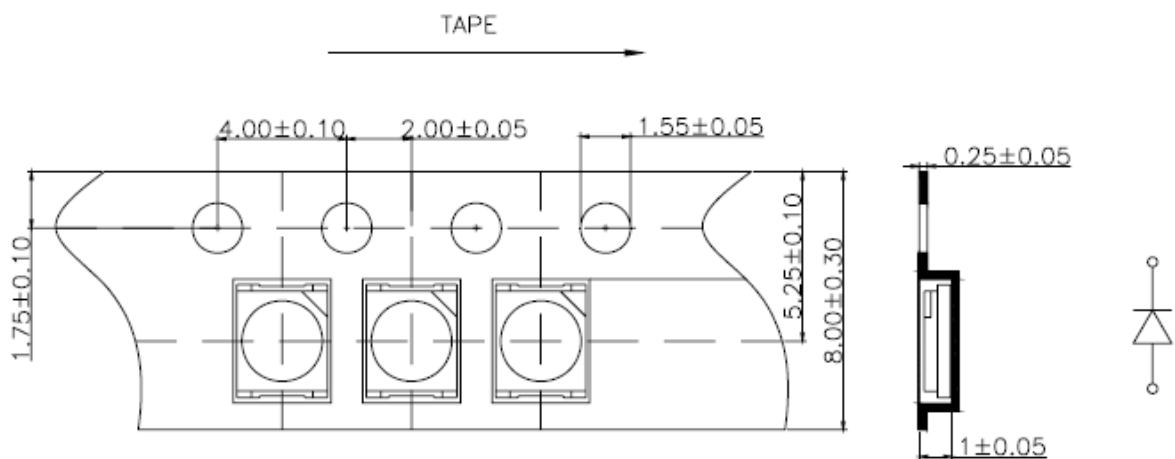
## ◆ Recommended soldering pattern

(Units:mm)



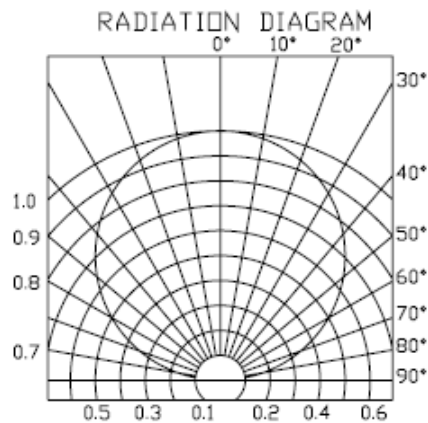
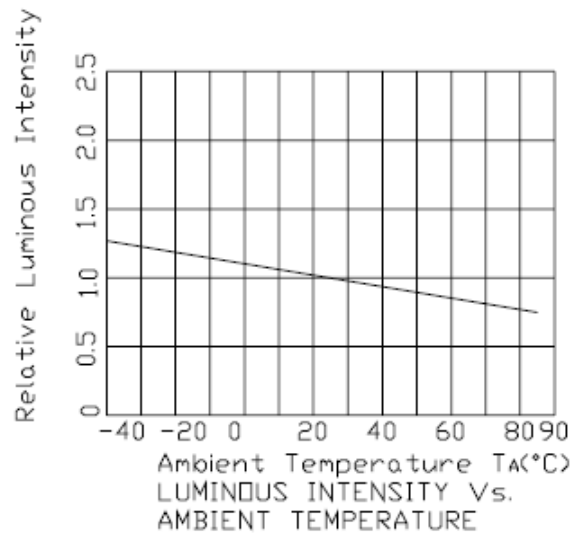
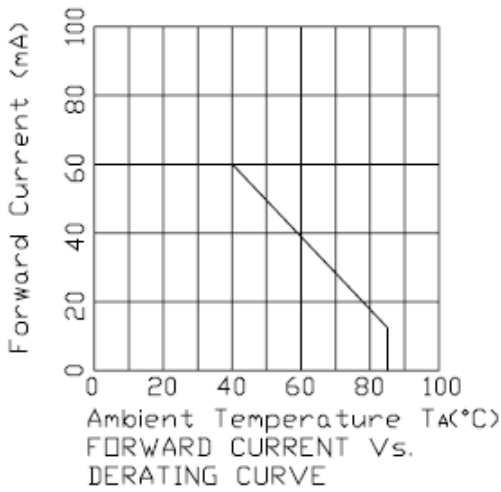
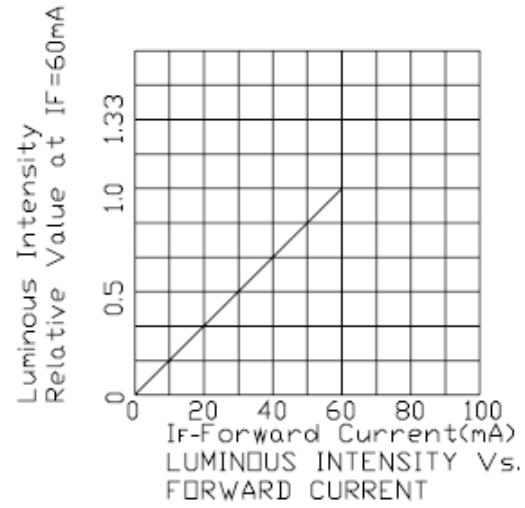
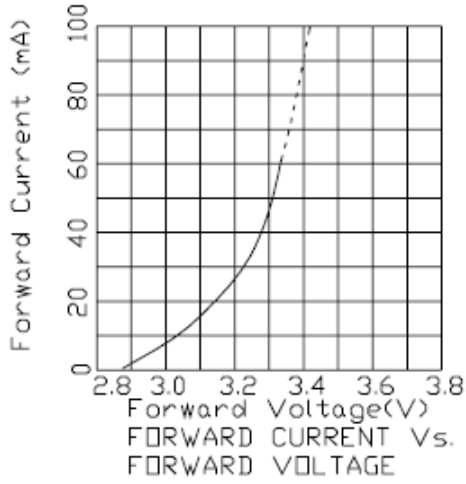
## ◆ Tape specifications

(Units:mm)





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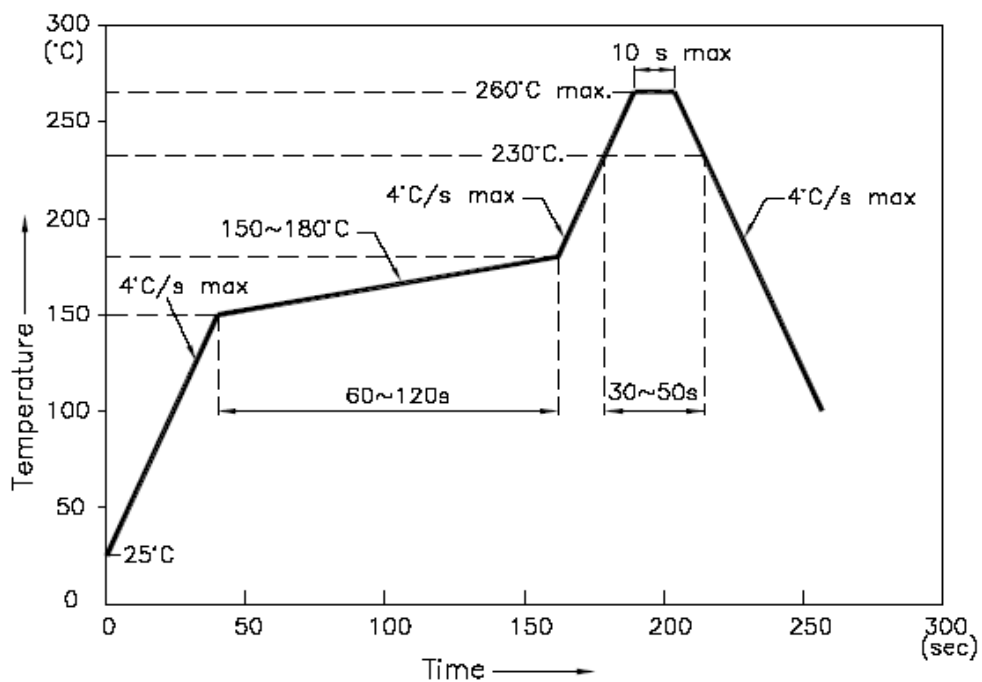




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<b>Precautions For Use :</b>
<b>Over - current - proof</b>
Customer must apply resistors for protection, otherwise slight voltage shift will cause big current change ( Burn out will happen )
<b>Storage</b>
1. The operation of temperature and R.H. are : $5^{\circ}\text{C} \sim 30^{\circ}\text{C}$ , 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 regent. 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





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## NOTES:

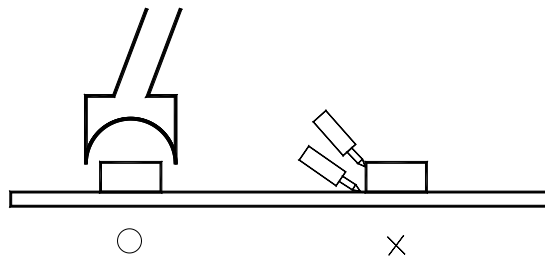
1. We recommend the reflow temperature  $245^{\circ}\text{C}(\pm 5^{\circ}\text{C})$ . the maximum soldering temperature should be limited to  $260^{\circ}\text{C}$ .
2. dont cause stress to the epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.

### ■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.