



YETDA INDUSTRY LTD.

Technical Data Sheet

MODEL NO : S776ANW4

3014 Package 3.0*1.4*0.8mm Chip LEDs

Features :

- Package in 8mm tape on 7" diameter reel
- Compatible with automatic placement equipment
- Compatible with reflow solder process

Applications :

- Indicators
- Automotive : backlighting in dashboard and switch
- Backlight for LCD

Dice material	Emitted color	Lens Color
InGaN	White	Yellow Diffused

Electrical/Optical Characteristics(Ta=25°C)

Parameter	Test Condition	Symbol	Value			Unit
			Min	Typ	Max	
Color Temperature	I _F =40mA	CCT	6000		7500	K
Forward voltage	I _F =40mA	V _F	3.0	.	3.2	V
Luminous Flux	I _F =40mA	Lm	18		20	Lm
Viewing angle at 50% I _v	I _F =40mA	2θ 1/2	--	120	--	Deg
Reverse current	V _r =5V	I _R	--	-	10	μA

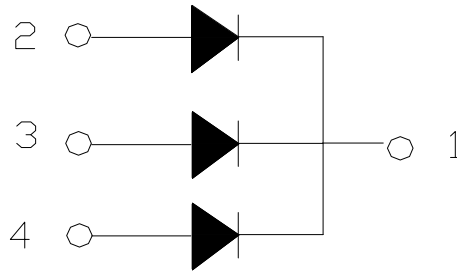
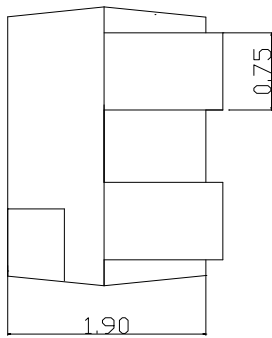
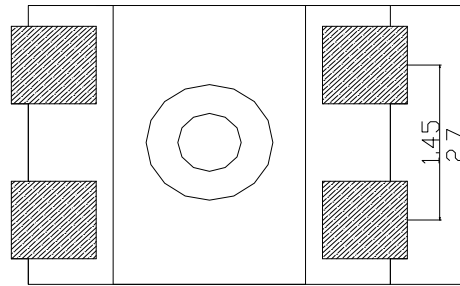
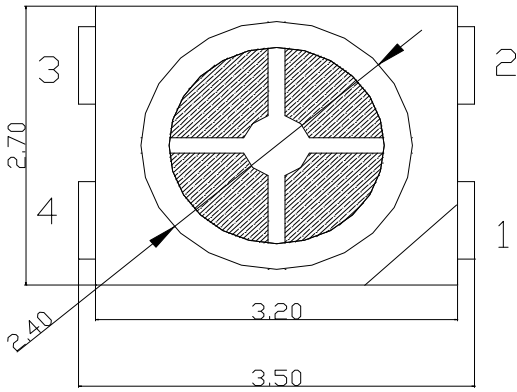
Absolute Maximum Ratings(Ta=25°C)

Parameter	Symbol	Value	Unit
		White	
Power Dissipation	P _d	200	mW
Forward current	I _F	60	mA
Reverse Current	I _R	10	uA
Reverse Voltage	V _R	5	V
Operating temperature range	Top	-40 ~+85	°C
Storage temperature range	Tstg	-40 ~+85	°C

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PACKAGING DIMENSIONS





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Typical Electro-Optical Characteristics Curve:

Fig 1. Forward Current vs. Forward Voltage

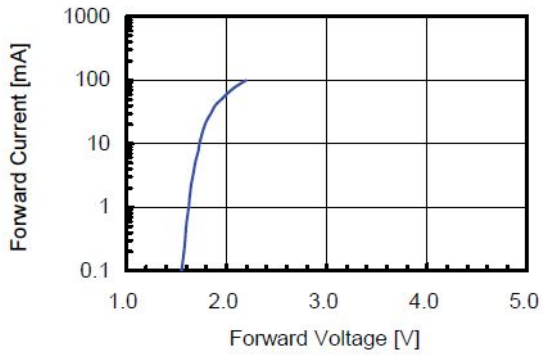


Fig 2. Relative Intensity vs. Forward Current

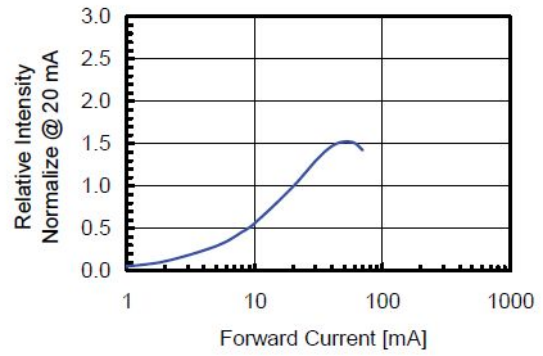


Fig 3. Forward Voltage vs. Temperature

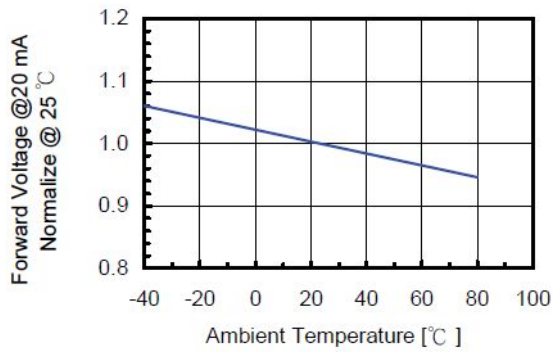
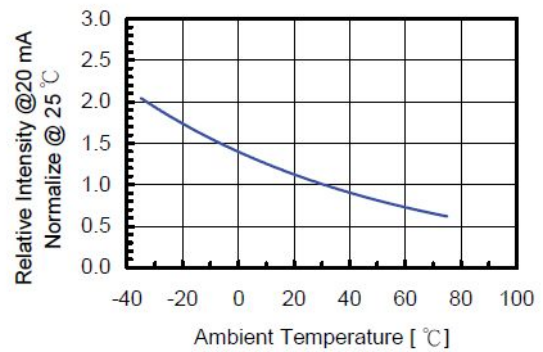


Fig 4. Relative Intensity vs. Temperature





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Precautions For Use :

Over - current - proof

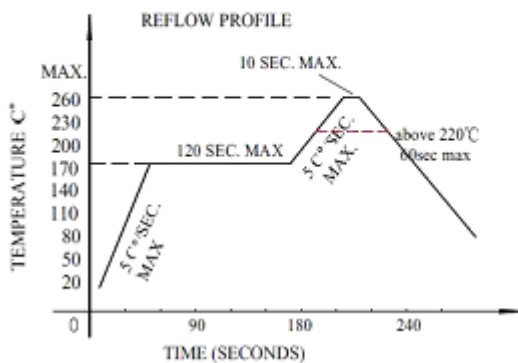
Customer must apply resistors for protection, otherwise slight voltage shift will cause big current change (Burn out will happen)

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 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

- Temperature-profile (Surface of circuit board)
Use the following conditions shown in the figure.



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.

■Soldering iron

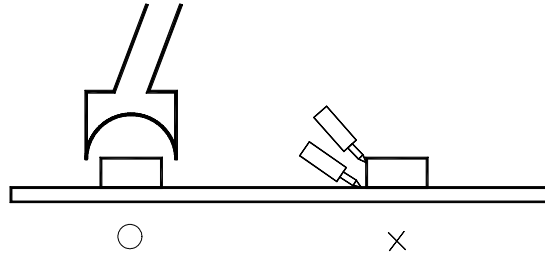
Basic spec is $\leq 5\text{sec}$ when 260°C . If temperature is higher, time should be shorter ($+10^{\circ}\text{C} \rightarrow -1\text{sec}$). Power dissipation of iron should be smaller than 20W, and temperatures should be controllable. Surface temperature of the device should be under 230°C .



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■ 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.