

Technical Data Sheet

MODEL NO: S150ANWW4-INH

3216 Package 3.2*1.6mm Chip LED

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/GaN	White	Yellow

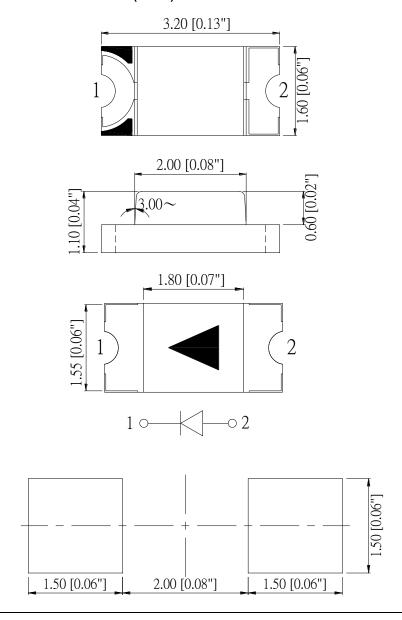
Electrical/Optical Characteristics(Ta=25 $^{\circ}$ C)

Parameter	Test	Symbol	Value			Unit
	Condition	Symbol	Min	Тур	Max	Unit
Dominant wavelength	I=20mA	Х	0.4104		0.488	nm
		Υ	0.4049		0.4765	
Forward voltage	I=20mA	VF	2.8		3.6	V
Luminous intensity	I==20mA	lv	630	850		mcd
Viewing angle at 50% lv	I==10mA	2θ 1/2		140		Deg
Reverse current	V _R =5V	lr			10	μА

Absolute Maximum Ratings(Ta=25℃)

Parameter	Symbol	Value	Unit
Power dissipation	Pd	108	mW
Forward current	lF	30	mA
Reverse voltage	Vr	5	V
Operating temperature range	Тор	-40 ~+80	$^{\circ}\!\mathbb{C}$
Storage temperature range	Tstg	-40 ~+85	$^{\circ}\!\mathbb{C}$
Peak pulsing current (1/8 duty f=1kHz)	IFP	125	mA

PACKAGING DIMENSIONS (mm):



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)

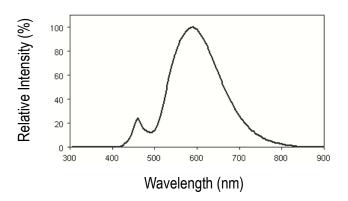
Storage

- 1. The operation of temperature and R.H. are : 5° C $\sim 30^{\circ}$ 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 : $60^{\circ}\text{C}\pm5^{\circ}\text{C}$ for 15hrs.

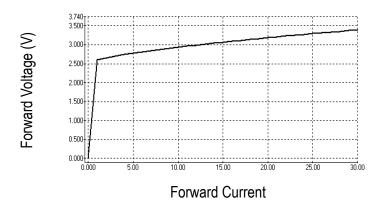


Optical Characteristic Curves

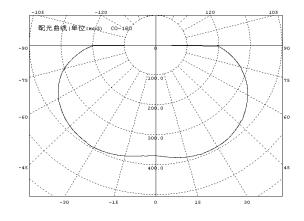
Relative Intensity vs. Wavelength



Forward Current vs. Forward Voltage

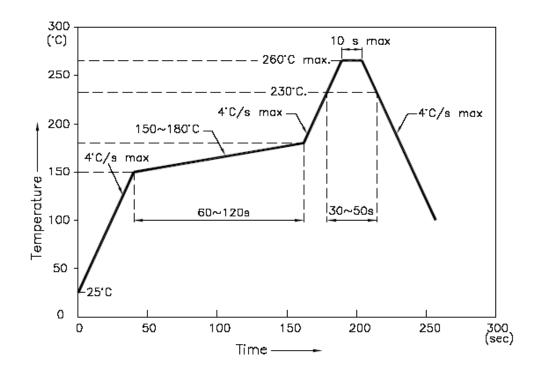


Directive Characteristics





■ Reflow Temp/Time



NOTES:

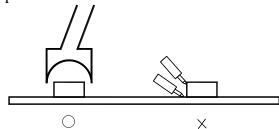
- 1. We recommend the reflow temperature $245^{\circ}\text{C}(\pm 5^{\circ}\text{C})$.the maximum soldering temperature should be limited to 260°C .
- 2. dont cause stress to the epoxy resin while it is exposed to high temperature.
- 3. Number of reflow process shall be 2 times or less.

■Soldering iron

Basic spec is \leq 5sec when 260°C. If temperature is higher, time should be shorter (+10°C \rightarrow -1sec). 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.

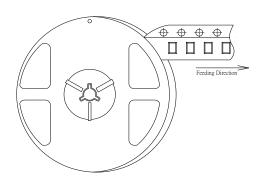


■ Avoid rubbing or scraping the resin by any object, during high temperature, for example reflow \ solder etc.

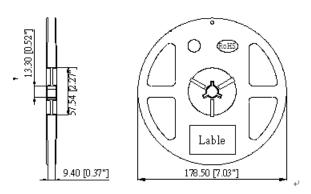


Packaging Specifications

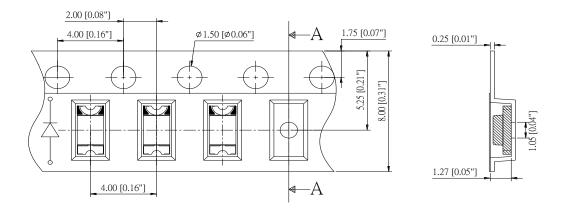
Feeding Direction



Dimensions of Reel (Unit: mm)



Dimensions of Tape (Unit: mm)



Arrangement of Tape

