

### **Technical Data Sheet**

#### MODEL NO: S0201ANW4-BH

0201Package 0.65\*0.35mm 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	Blue	Yellow

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

Parameter	Test	Symbol	Value			- Unit
	Condition		Min	Тур	Мах	Unit
Spectral half bandwidth	IF=5mA	$\bigtriangleup \lambda$		22		nm
CIEWavelength	IF=5mA	Λd		6500		К
Forward voltage	IF=5mA	VF	2.6		3.20	v
Luminous intensity	I⊧=5mA	lv	180		320	mcd
Viewing angle at 50% lv	IF=5mA	2 <i> </i>		120		Deg
Reverse current	Vr=5V	lr			10	μA



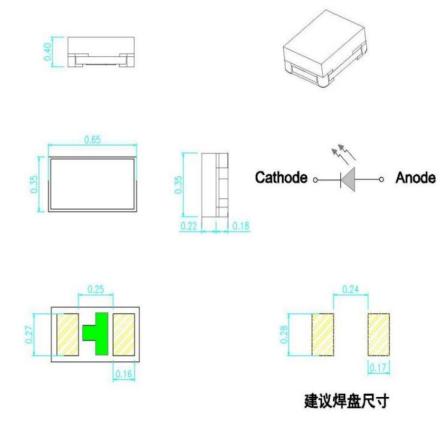
#### Absolute Maximum Ratings(Ta=25°C)

Parameter	Symbol	Value	Unit
Power dissipation	Pd	92	mW
Forward current	lf	20	mA
Reverse voltage	Vr	5	V
Operating temperature range	Тор	-40 ~+80	°C
Storage temperature range	Tstg	-40 ~+85	°C
Peak pulsing current (1/8 duty f=1kHz)	IFP	100	mA

Note:

- 1. 1/10 Duty cycle, 0.1ms pulse width.
  2. Theaboveforwardvoltagemeasurementallowancetoleranceis±0.1V.
  3. Theabovedominate wavelength measurementallowancetoleranceis±1nm.

### PACKAGING DIMENSIONS (mm):



Notes:

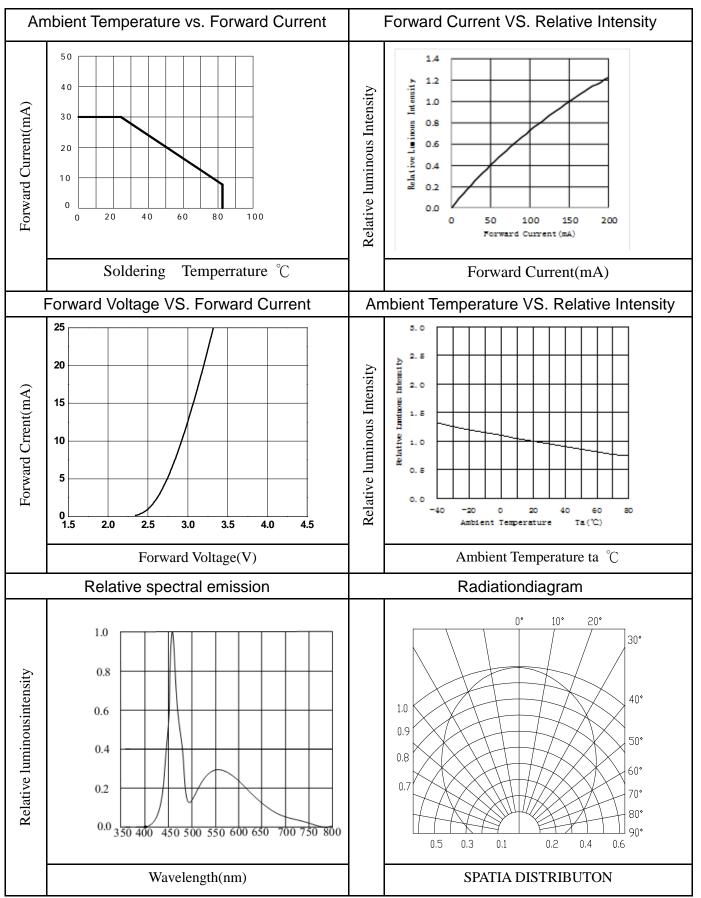
1. All dimension units are millimeters.

2.All dimension tolerance is  $\pm 0.15$ mm unless otherwise noted.





### Typical Electro-Optical Characteristics Curve:





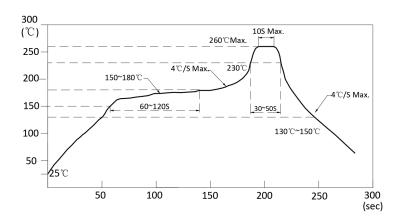
#### **Precautions For Use :**

#### **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  $: 5^{\circ}C \sim 30^{\circ}C$ , 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 :  $60^{\circ}C\pm 5^{\circ}C$  for 15 hrs.
- Reflow Temp/Time



Notes:

- 1.We recommend the reflow temperature  $245^{\circ}C(\pm 5^{\circ}C)$ .The maximum soldering temperature should be limited to  $260^{\circ}C$ .
- 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.



■Soldering iron

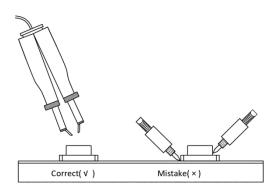
Basic spec is  $\leq 5$  sec when  $320^{\circ}C(\pm 20^{\circ}C)$ . If temperature is higher, time should be shorter(+10  $^{\circ}C \rightarrow -1$  sec).

Powerdissipation of iron should be smaller than 20W, and temperatures should be controllable .Surface

temperature of the device should be under  $350^{\circ}$ C.

#### Rework

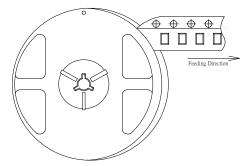
- 1.Customer must finish rework within 5 sec under  $340^{\circ}$ C.
- 2. The head of iron cannot touch copper foil
- 3. Twin-head type is preferred.



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

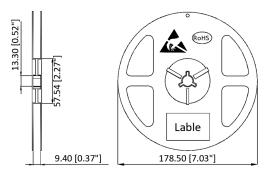


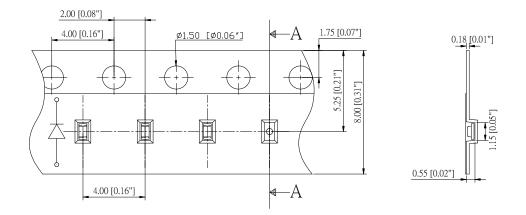
#### **Feeding Direction**

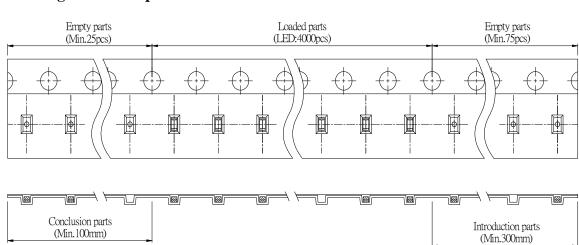


#### ■Dimensions of Tape (Unit: mm)

#### Dimensions of Reel (Unit: mm)







#### ■Arrangement of Tape

#### ■Note

- 1. Empty component pockets are sealed with top cover tape;
- $\ensuremath{\mathbf{2}}.$  The maximum number of missing lamps is two.
- 3.4,000 pcs/Reel.