

## SMD 2835 1W HV Series Data Sheet

### SOL-2835X100-XX



**SOL-2835X100-06**

**6V WHITE**

**SOL-2835X100-09**

**9V WHITE**

**SOL-2835X100-18**

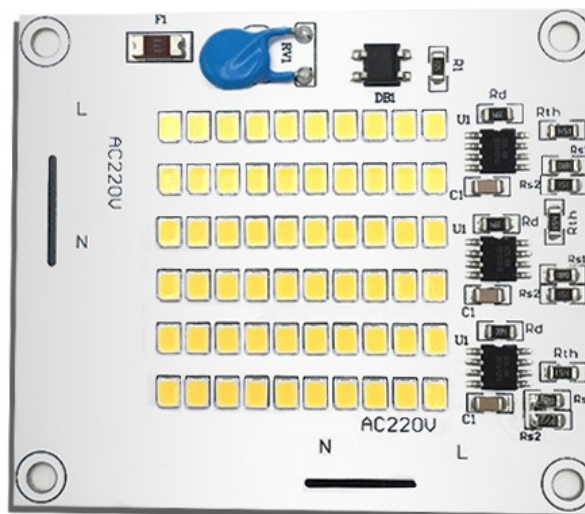
**1V WHITE**

## ➤ Features:

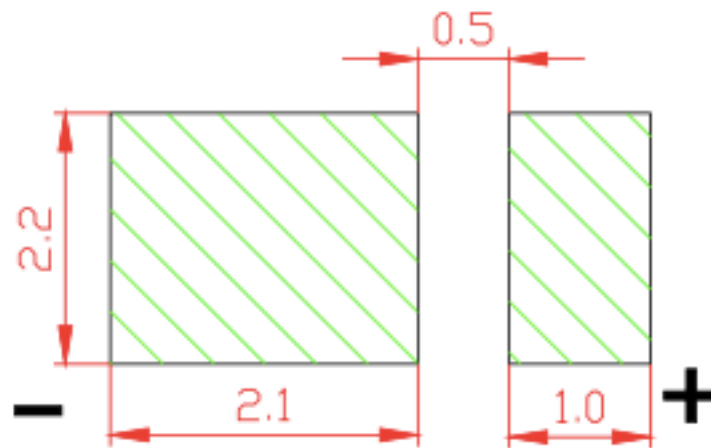
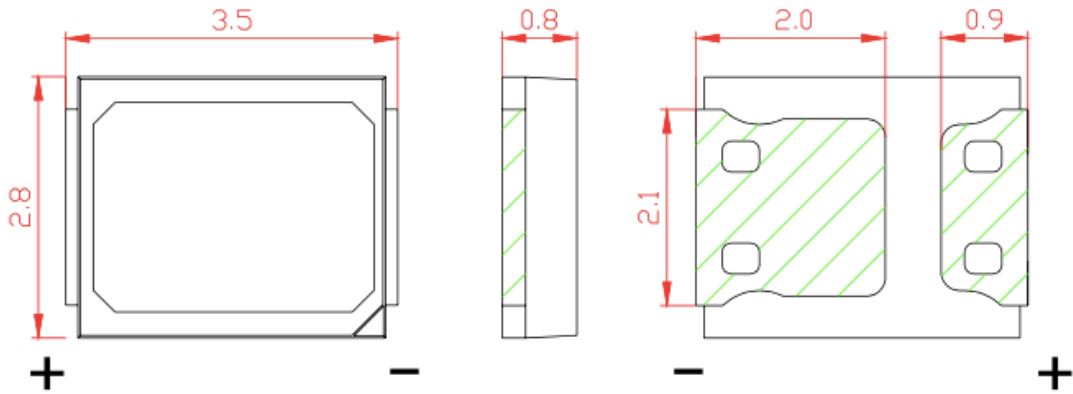
- Super high efficiency
- High reliability performance
- Viewing angle 120°
- Suitable for all SMT assembly and solder process
- Complied with RoHS directive

## ➤ Application:

- Indoor lighting
- Outdoor lighting
- Entertainment lighting
- Commercial lighting



## ➤ Outline Dimensions:



Soldering pads reference

## Note:

- Tolerance is  $\pm 0.1$ mm

## ➤ Flux Characteristics, T<sub>j</sub>=25°C:

### 1, SOL-2835X100-06 6V 150MA

Part Number	CCT (K)or Wavelength(nm)		LuminousFlux@150mA (Lm )		Viewing Angle (degrees) 2 θ <sub>1/2</sub>
	Min.	Max.	Min.	Max.	
SOL-2835W100-06	2700K	3500K	100LM	120LM	120
SOL-2835N100-06	3500K	4500K	110LM	130LM	120
SOL-2835C100-06	5000K	10000K	110LM	130LM	120

### 2, SOL-2835X100-09 9V 100MA

Part Number	CCT (K)or Wavelength(nm)		LuminousFlux@100mA (Lm )		Viewing Angle (degrees) 2 θ <sub>1/2</sub>
	Min.	Max.	Min.	Max.	
SOL-2835W050-09	2700K	3500K	100LM	120LM	120
SOL-2835N050-09	3500K	4500K	110LM	130LM	120
SOL-2835C050-09	5000K	10000K	110LM	130LM	120

3, SOL-2835X100-18 18V 60MA

Part Number	CCT (K)or Wavelength(nm)		LuminousFlux@60mA (Lm )		Viewing Angle (degrees) $2\theta_{1/2}$
	Min.	Max.	Min.	Max.	
SOL-2835W100-18	2700K	3500K	110LM	130LM	120
SOL-2835N100-18	3500K	4500K	120LM	140LM	120
SOL-2835C100-18	5000K	10000K	120LM	140LM	120

## Note:

- SOL maintains a tolerance of  $\pm 1\text{nm}$  for dominant wavelength measurements.
- SOL maintains a tolerance of  $\pm_{SEP}^{[1]}$ 5% for CCT measurements.
- SOL maintains a tolerance of  $\pm 5\%$  on flux and power measurements. $_{SEP}^{[1]}$

## ➤ Electrical Characteristics, T<sub>j</sub>=25°C:

Part Number	Forward Voltage V <sub>F</sub> (V) @60mA		
	Min.	Typ.	Max.
SOL-2835X100-06	5.6	6.0	6.8

Part Number	Forward Voltage V <sub>F</sub> (V) @30mA		
	Min.	Typ.	Max.
SOL-2835X100-09	8.4	9.0	9.8

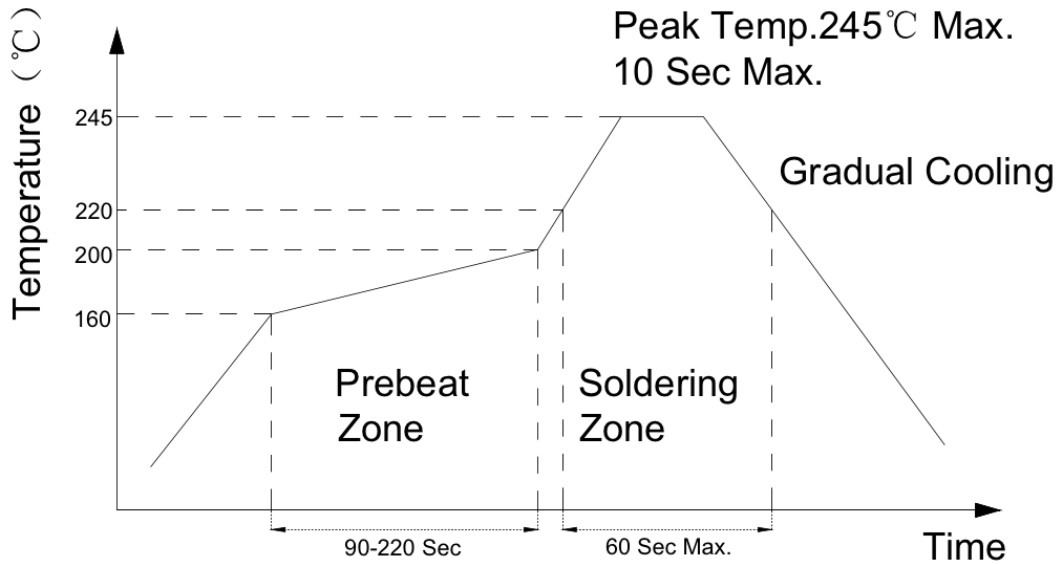
Part Number	Forward Voltage V <sub>F</sub> (V) @15mA		
	Min.	Typ.	Max.
SOL-2835X100-18	16.8	18.0	19.2

### Note:

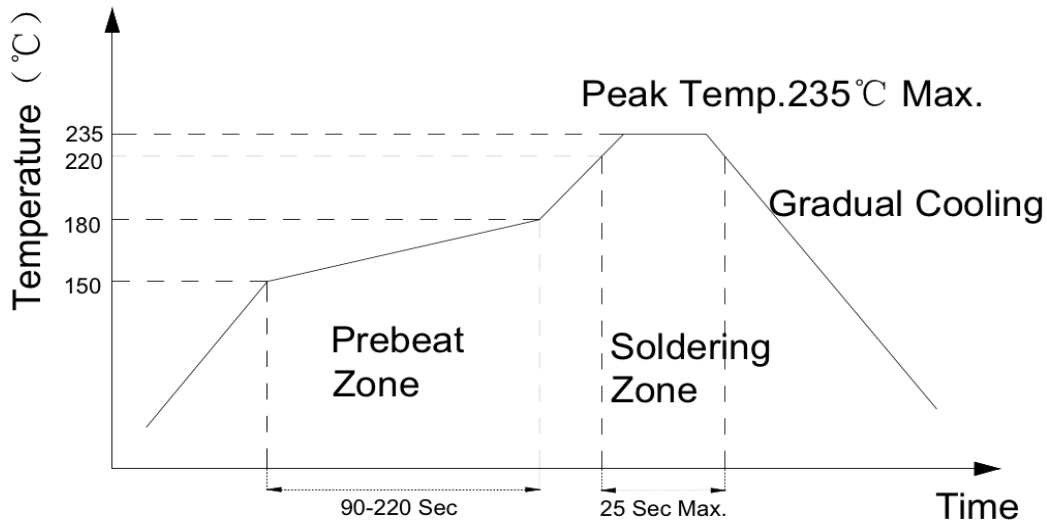
- SOL maintains a tolerance of ±0.1v for Voltage measurements.

## ➤ IR reflow soldering Profile:

Lead Free solder



Lead solder



## NOTES:

- We recommend the reflow temperature  $240^{\circ}\text{C} \pm 5^{\circ}\text{C}$ .
- Don't cause stress to the silicone resin while it is exposed to high temperature.
- Number of reflow process shall be 1 time.

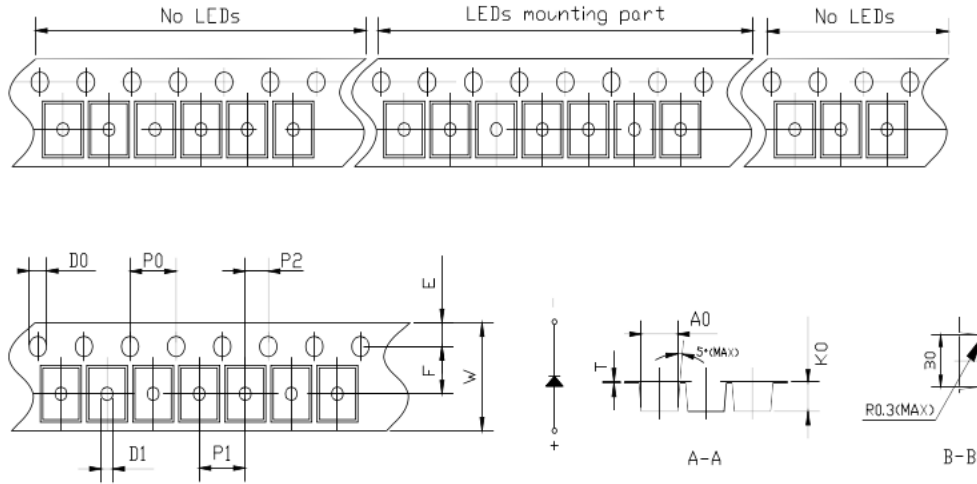
## ➤ Test items and results of reliability:

Test Item	Test Conditions	Duration/ Cycle	Number of damage	Reference
Temperature	-40° C 30min ↑↓25° C(2min) 100° C 30min	100 times	0/100	JEITA ED-4701300 303
Thermal Shock	40° C 30min ↑↓ 5sec 100° C 30min	100 times	0/100	JEITA ED-4701200 303
High Temperature Storage	Ta=100° C	1000 hours	0/100	EIAJED-4701200 201
Humidity Heat Storage	Ta=85° C RH=85%	1000 hours	0/100	EIAJED-4701100 103
Low Temperature Storage	Ta=-40° C	1000 hours	0/100	EIAJED-4701200 202
Room Temperature Test	Ta=25° C IF=60mA	1000 hours	0/100	Tested with SOL standard
High Humidity Heat Test	60° C RH=90% IF=60mA	1000 hours	0/100	Tested with SOL standard
Low Temperature Test	Ta=-40° C IF=60mA	1000 hours	0/100	Tested with SOL standard
ESD(HBM)	-4KV at 1.5KΩ; 100pF	3 times	0/100	MIL-STD-883D



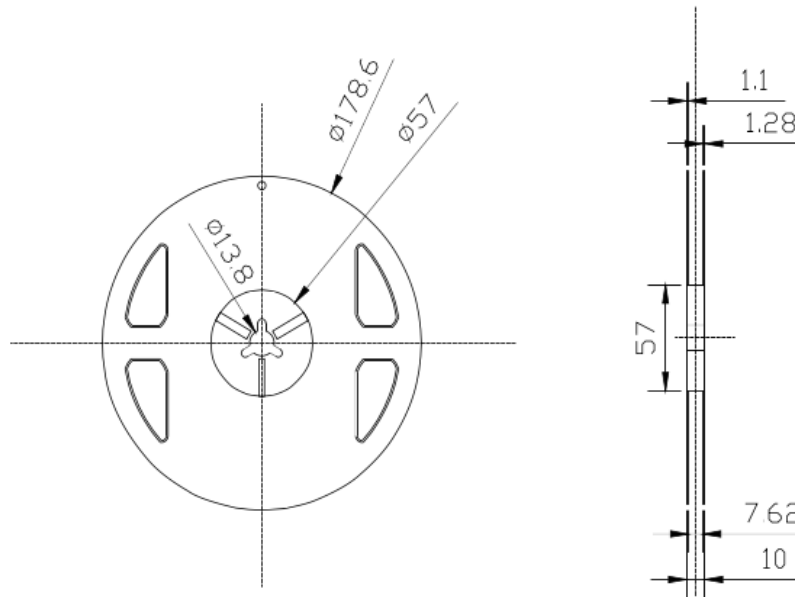
## ➤ Packaging:

### 1. Dimension of Tape (Unit: mm)

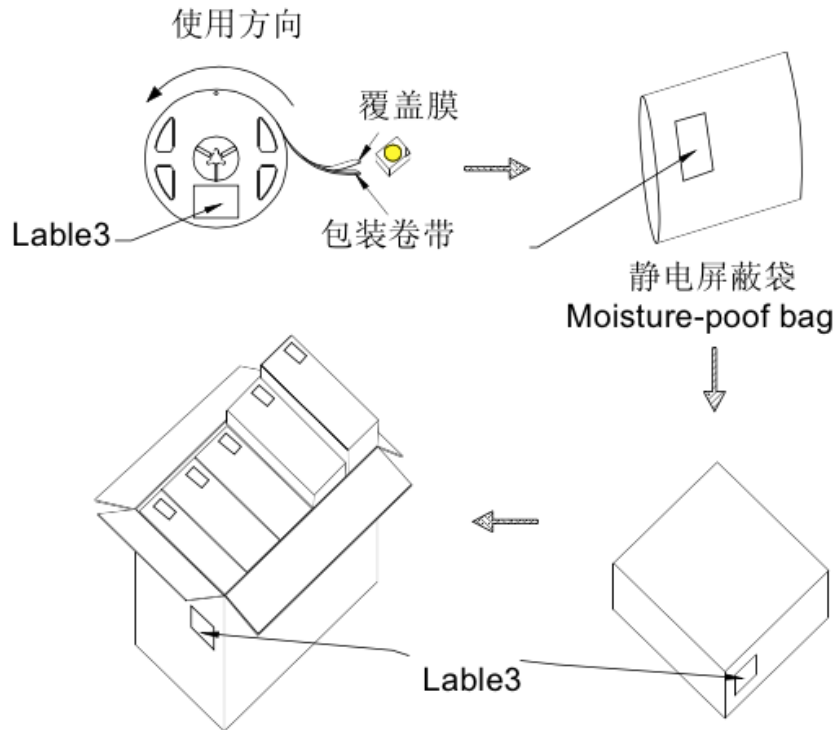


symbol	A0	B0	K0	P0	P1	P2	model	unit
spec	$3.15 \pm 0.10$	$3.80 \pm 0.10$	$2.10 \pm 0.10$	$4.00 \pm 0.10$	$4.00 \pm 0.10$	$2.00 \pm 0.10$		
symbol	W	T	E	F	D0	D1	2835	mm
spec	$8.00 \pm 0.10$	$0.235 \pm 0.05$	$1.75 \pm 0.10$	$3.50 \pm 0.10$	$1.50^{+0.10}_{-0.00}$	$1.00^{+0.10}_{0.00}$		

### 2. Dimension of Reel (Unit: mm)



### 3.Dimension of Package (Unit: mm)



每个外箱装5个内箱  
外箱尺寸=425\*245\*273mm  
Outside box  
Maximums for inside  
boxes

每盒5袋  
内箱尺寸：247\*230\*75  
Inside box Maximums seven

## Thank You!

