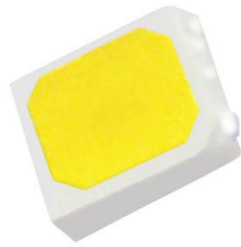


SMD 2835 0.2W Series Data Sheet

SOL-2835X020-XX



SOL-2835W020-03

Warm White

SOL-2835N020-03

Nature White

SOL-2835C020-03

Cool White

SOL-2835R020-02

Red

SOL-2835A020-02

Amber

SOL-2835Y020-02

Yellow

SOL-2835G020-03

Green

SOL-2835B020-03

Blue

➤ Features:

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

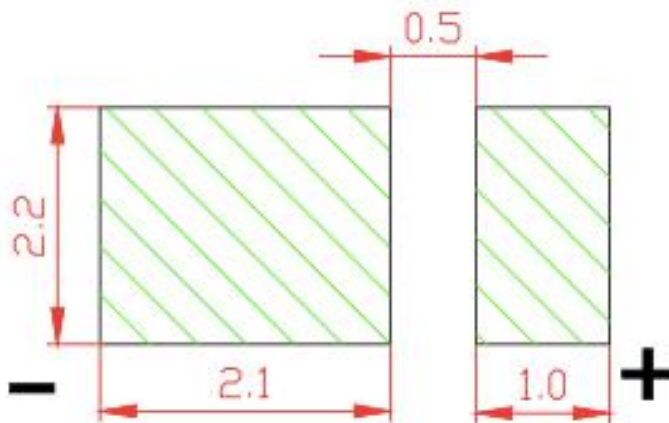
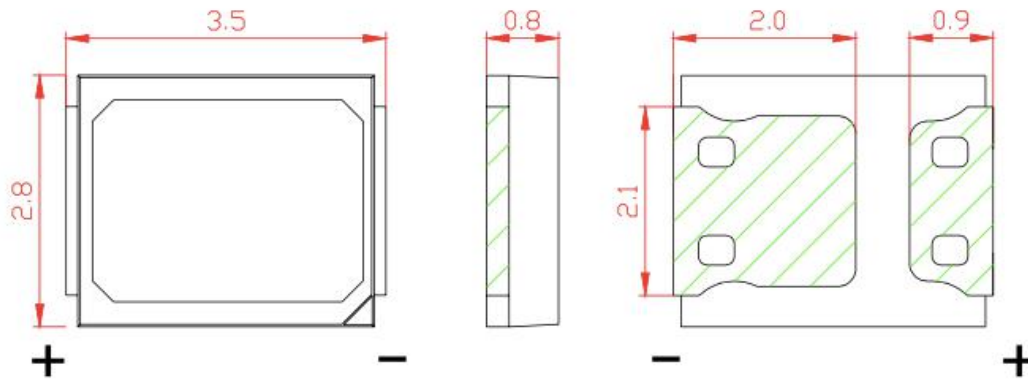
➤ Application:

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



➤ Outline Dimensions:

1,for White, Blue,Green chips

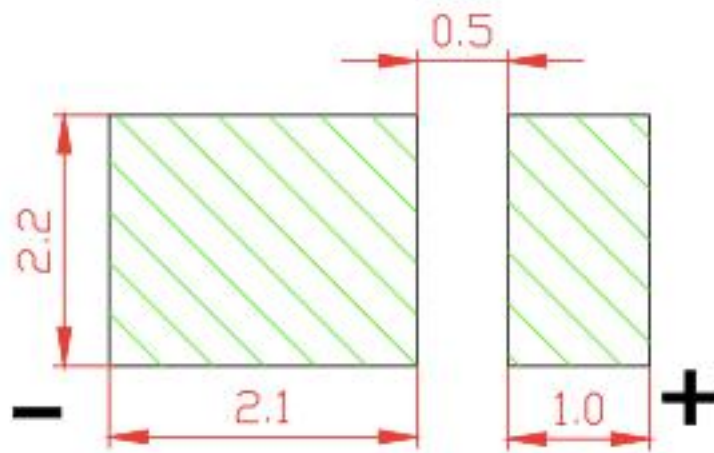
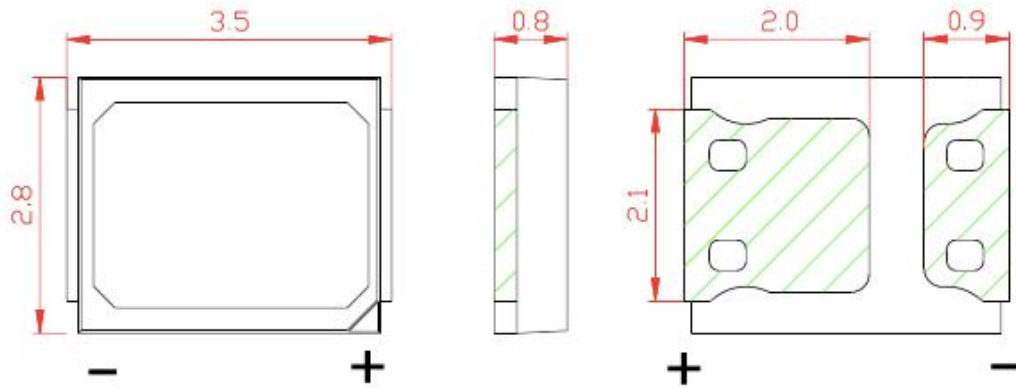


Soldering pads reference

Note:

- Tolerance is -0.1mm

2,for Yellow,Amber,Red Chips



Soldering pads reference

Note:

- Tolerance is $\pm 0.1\text{mm}$

➤ Flux Characteristics, T_j=25°C:

Part Number	CCT (K)or Wavelength(nm)		Luminous Flux@60mA (Lm)(MCD)		Viewing Angle (degrees) 2 θ _{1/2}
	Min.	Max.	Min.	Max.	
SOL-2835W020-03	2700K	3500K	22LM	28LM	120
SOL-2835N020-03	3500K	4500K	24LM	30LM	120
SOL-2835C020-03	5000K	10000K	24LM	30LM	120
SOL-2835R020-02	620nm	630nm	1200MCD	1800MCD	120
SOL-2835A020-02	595nm	605nm	800MCD	1400MCD	120
SOL-2835Y020-02	585nm	595nm	800MCD	1400MCD	120
SOL-2835G020-03	515nm	530nm	2300MCD	3000MCD	120
SOL-2835B020-03	455nm	475nm	400MCD	1000MCD	120

Note:

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

➤ Electrical Characteristics, T_j=25°C:

Part Number	Forward Voltage V _F (V) @60mA		
	Min.	Typ.	Max.
SOL-2835WW020-XX	2.8	3.0	3.5
SOL-2835NW020-XX	2.8	3.0	3.5
SOL-2835CW020-XX	2.8	3.0	3.5
SOL-2835R020-XX	1.8	2.0	2.4
SOL-2835A020-XX	1.8	2.0	2.4
SOL-2835Y020-XX	1.8	2.0	2.4
SOL-2835G020-XX	2.8	3.0	3.5
SOL-2835B020-XX	2.8	3.0	3.5

Note:

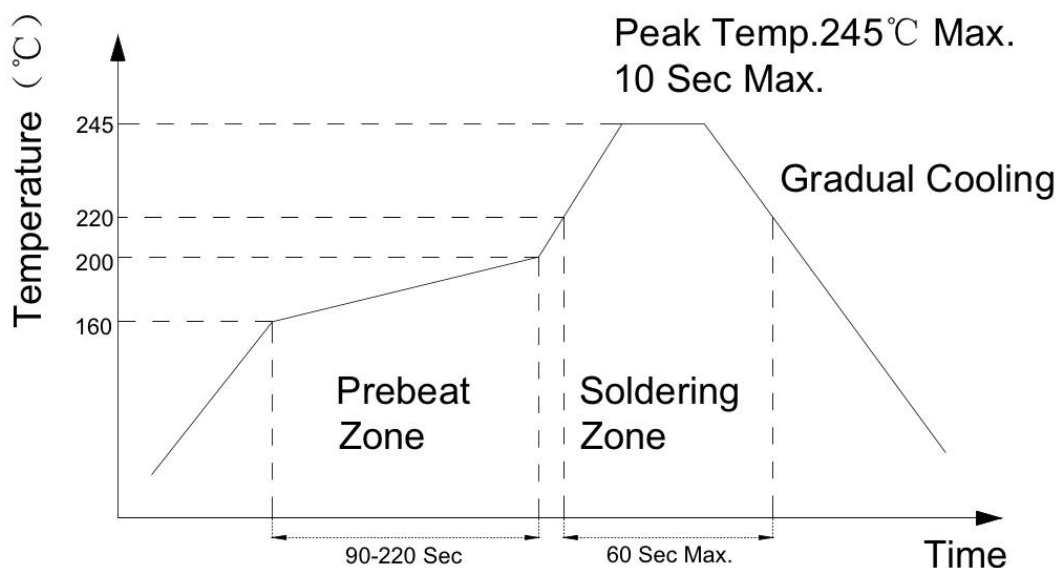
- SOL maintains a tolerance of ±0.1v for Voltage measurements.

➤ Absolute Maximum Ratings:

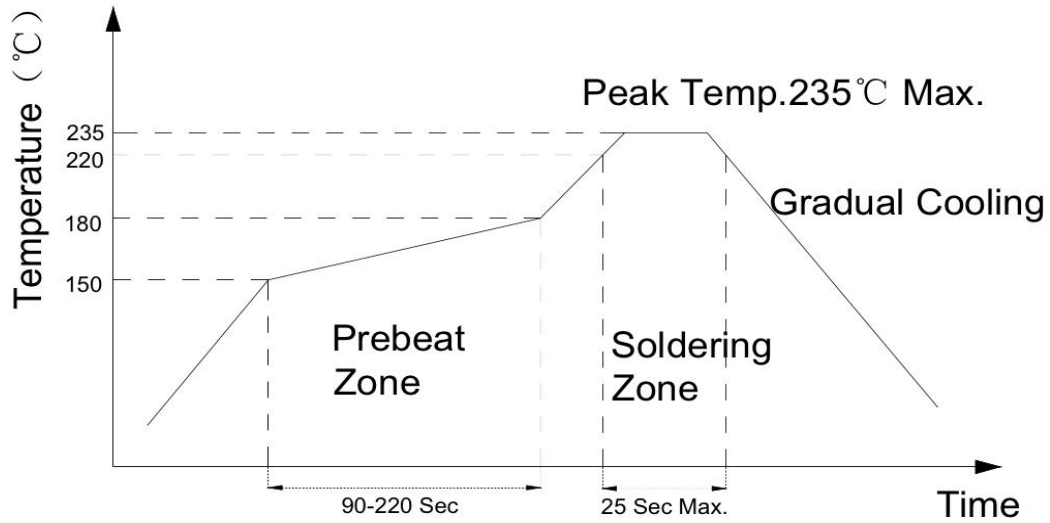
Parameter	Symbol	Test Condition	Value		Unit
			Min.	Max.	
Power Dissipation	Pd			200	mW
Reverse Voltage	VR	IR = 30μA	5		V
Pulse Current	IFp	Duty=0.1,1kHz		100	mA
Forward Current	IFm			60	mA
Operating Temperature	Topr		-40	+85	°C
Storage Temperature	Tstr		-40	+100	°C

➤ IR reflow soldering Profile:

Lead Free solder



Lead solder



NOTES:

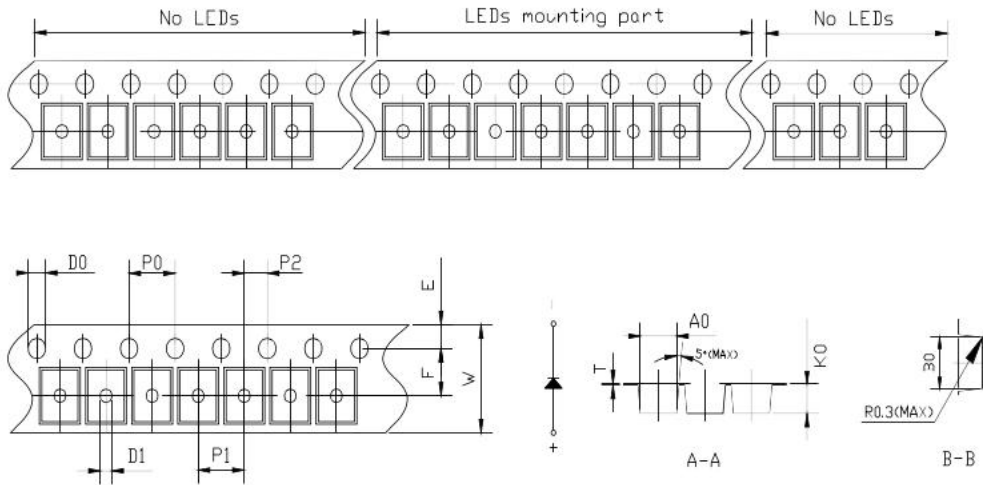
- We recommend the reflow temperature $240^{\circ}\text{C} \pm 5^{\circ}\text{C}$.
- Don't cause stress to the silicone resin while it is exposed to high temperature.
- Number of reflow process shall be 1 time.

➤ 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

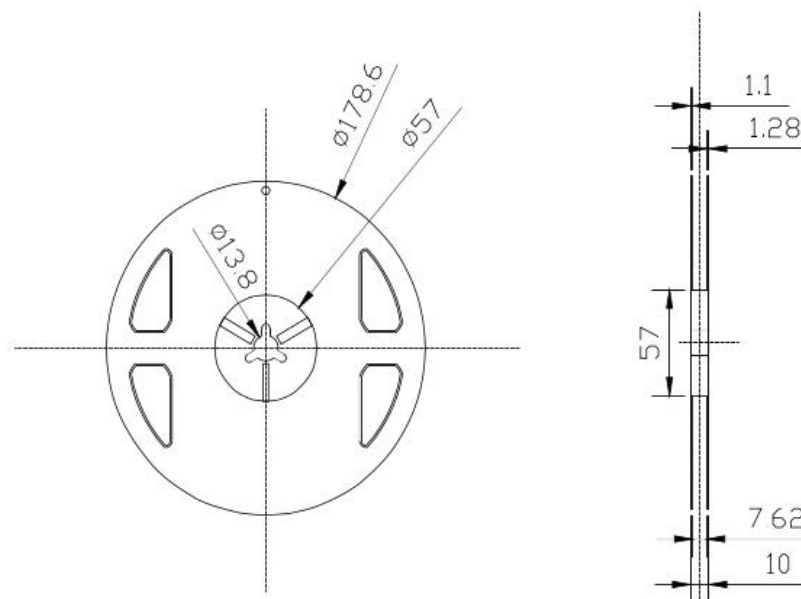
➤ Packaging:

1. Dimension of Tape (Unit: mm)

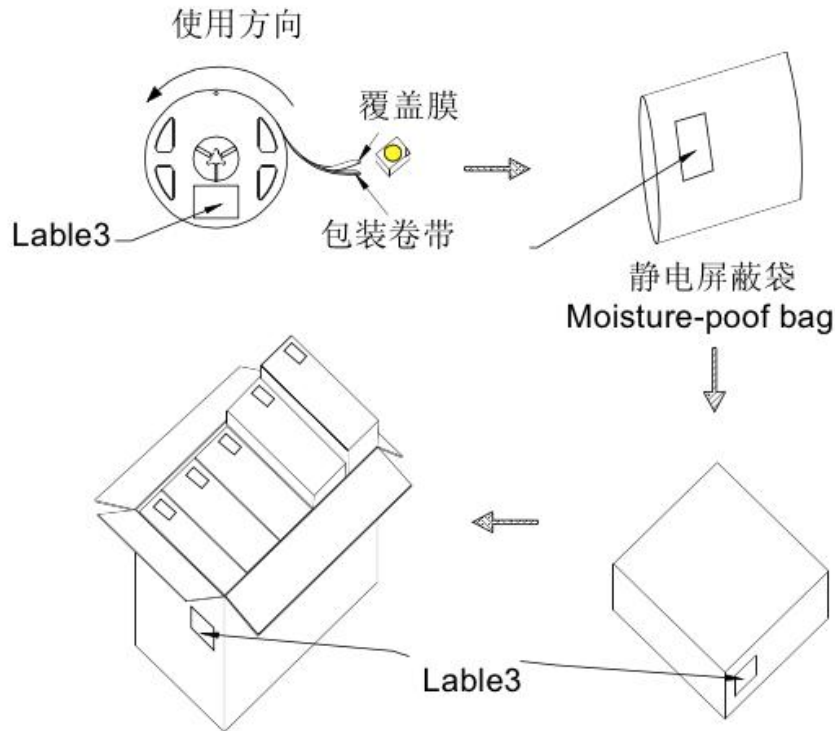


symbol	A0	B0	K0	P0	P1	P2	mode	unit
spec	3.15±0.10	3.80±0.10	2.10±0.10	4.00±0.10	4.00±0.10	2.00±0.10		
symbol	W	T	E	F	D0	D1	2835	mm
spec	8.00±0.10	0.235±0.05	1.75±0.10	3.50±0.10	1.50 ^{+0.10} _{-0.00}	1.00 ^{+0.10} _{0.00}		

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!

