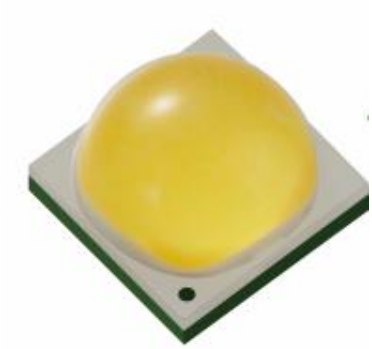
SPECIFICATION

CER3535 A22 Series



Code : CER3535 A22 Series

Part No. : CER3535-A22-V1-XX-A

Description : High Efficiency 3535 LED Series

Version No. : V1.1

Date : 2026-05-18

Customer Approved	Approved	
Approved	**Approved**	**Issued**
☐Sample	☑Mass Product	

RoHS compliant

LM-80 LED light source maintenance test

EYE EN62471/IEC TR 62778

Address : No.9, Xing Xi Road, Hubei Town, Hubei District, China (PRC)
地址：中国湖北省湖北镇兴西路9号
Email : everbriteopto@hotmail.com

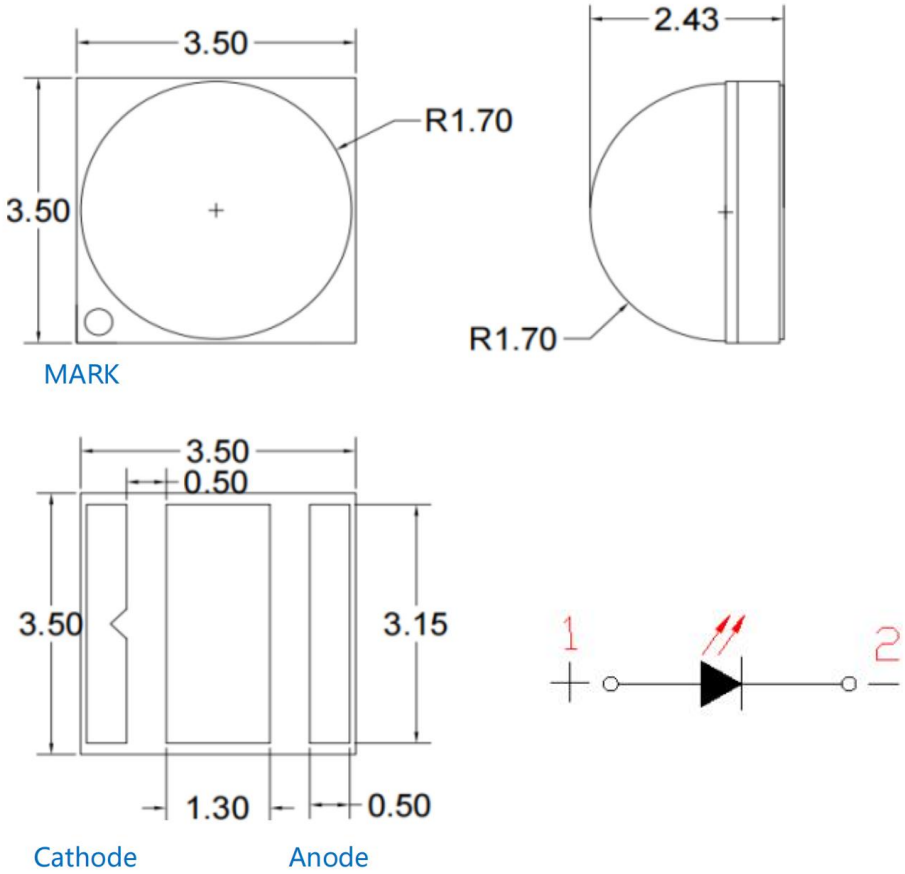
◆Features :

* High Efficiency : 215-225LM @ 1W (4000K, 70RA)
* Low voltage operation
* Maximum Power of 6W
* High Thermal Steady-State Maintainance
* RoHS compliant
* Strengthened Anti-Sulfurization

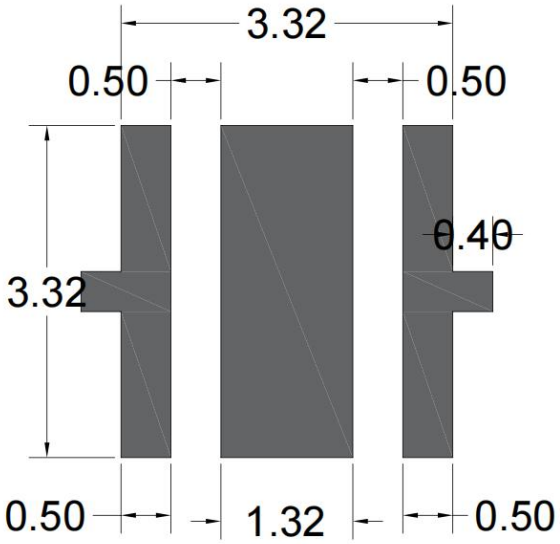
◆Applications:

* Street Lights
* Stadium Lights
* Floodlights
* Highbay / Down Lights

◆Package Dimensions



Soldering patterns

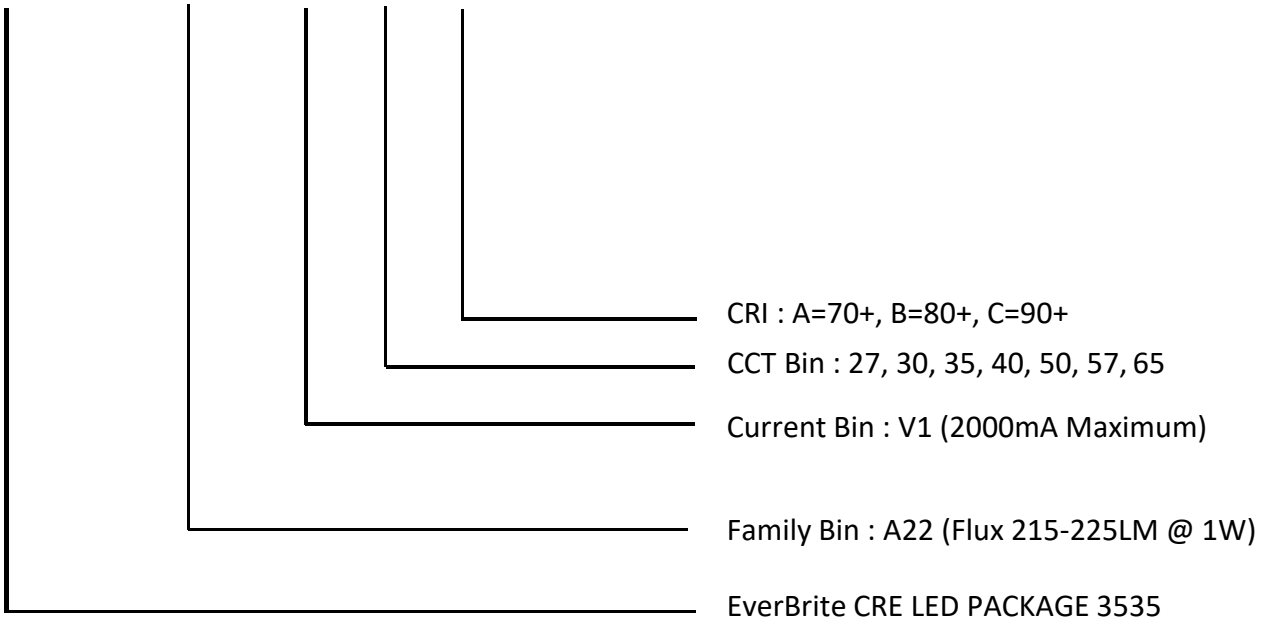


Notes:

1. All dimensions are in mm
2. Tolerance is ±0.15mm unless otherwise noted.

◆Product coding rules :

CER3535 - A22 - V1 - XX - A



◆ Product Selection Guide (TA=25℃)

RA Min.	Nominal CCT(K)	Product Series	Product Code	Colour Bin	Flux Typical 350mA 25℃ (Φv,lm)	Flux Typical 350mA 85℃ (Φv,lm)
70	2700	CER3535	CER3535-A22-V1-27-A	27	197	182
	3000	CER3535	CER3535-A22-V1-30-A	30	204	186
	3500	CER3535	CER3535-A22-V1-35-A	35	210	194
	4000	CER3535	CER3535-A22-V1-40-A	40	217	200
	5000	CER3535	CER3535-A22-V1-50-A	50	214	197
	5700	CER3535	CER3535-A22-V1-57-A	57	210	194
	6500	CER3535	CER3535-A22-V1-65-A	65	208	192

◆Forward Voltage Ranks (T_A=25℃)

No.	Min.	Max.	Unit	Condition
1	2.8	3.0	V	IF=350mA
2	3.0	3.2		
3				

◆ Absolute Maximum Ratings (T_A=25℃)

Parameter	Symbol	Rating	Unit
Forward Current	I_F	2000	mA
Maximum Forward Current	I_{FP}	2400	mA
Power Dissipation	P_O	6.0	W
Reverse voltage	V_R	Backdrive not allowed	V
Operation temperature	T_{opr}	-40 to +105	℃
Storage Temperature Range	T_{stg}	-30 to +100	℃
Junction Temperature	Tj	150	℃
Thermal resistance	R_θ	5	℃/W
Soldering Temperature	Tsld	260℃ for 10sec	
Electrostatic Discharge	ESD	8000	V
Color Tolerance	SDCM	5	---

Notes：

1. Frequency 10KHz, duty ratio ≤10%
2. The forward pulse current is the maximum current used by the chip at 25 ℃.

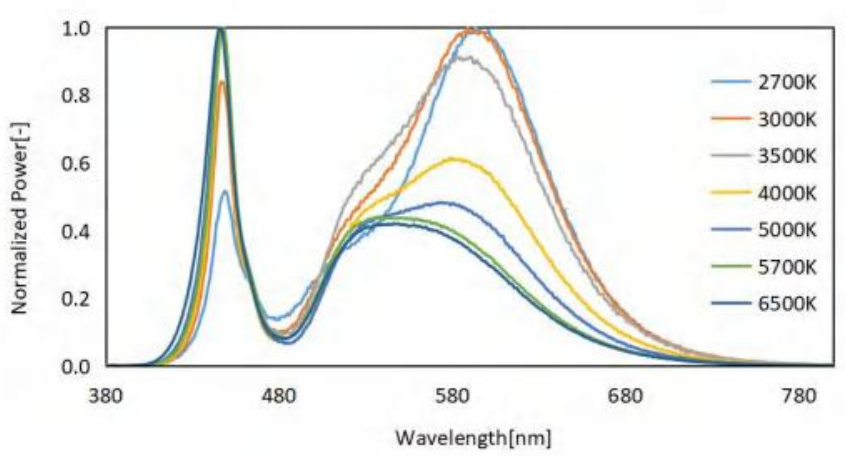
◆ Product Selection Guide (TA=25℃)

Product Code	Nomial	RA	350mA@0.99W		700mA@2.09W		1000mA@3.11W		1200mA@3.83W		1500mA@4.96W	
	CCT (K)	Min.	Flux	Efficacy	Flux	Efficacy	Flux	Efficacy	Flux	Efficacy	Flux	Efficacy
CER3535-A22-V1-27-A	2700	70	197.5	199	372.7	178	511.0	164	597.7	156	721.5	145
CER3535-A22-V1-30-A	3000	70	204.0	206	385.0	184	527.8	170	617.4	161	745.3	150
CER3535-A22-V1-35-A	3500	70	210.5	213	397.5	190	544.7	175	637.1	166	769.1	155
CER3535-A22-V1-40-A	4000	70	217.0	219	409.6	196	561.5	181	656.8	171	792.9	160
CER3535-A22-V1-50-A	5000	70	214.8	217	405.5	194	555.9	179	650.2	170	785.0	158
CER3535-A22-V1-57-A	5700	70	210.5	213	397.3	190	544.7	175	637.1	166	769.1	155
CER3535-A22-V1-65-A	6500	70	208.3	210	393.2	188	539.0	173	630.5	165	761.2	153

◆ Product Selection Guide (TA=85℃)

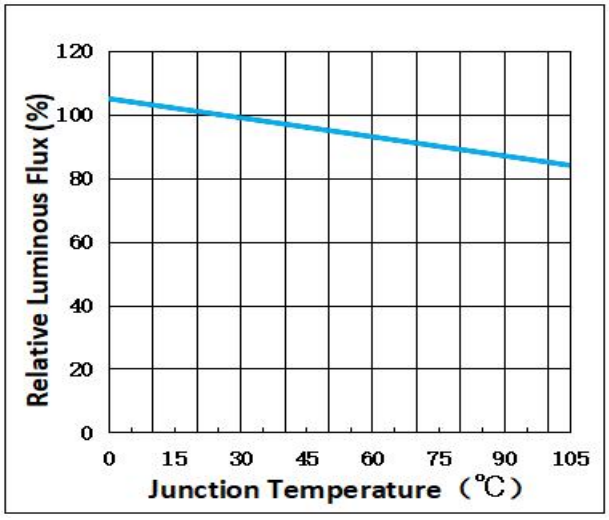
Product Code	Nomial	RA	350mA@0.963W		700mA@2.039W		1000mA@3.036W		1200mA@3.741W		1500mA@4.96W	
	CCT (K)	Min.	Flux	Efficacy	Flux	Efficacy	Flux	Efficacy	Flux	Efficacy	Flux	Efficacy
CER3535-A22-V1-27-A	2700	70	181.5	189	337.6	166	458.3	151	536.2	143	644.2	133
CER3535-A22-V1-30-A	3000	70	187.6	195	348.7	171	473.4	156	553.8	148	665.4	137
CER3535-A22-V1-35-A	3500	70	193.5	201	359.9	176	488.5	161	571.5	153	686.7	141
CER3535-A22-V1-40-A	4000	70	199.5	207	371.0	182	503.6	166	589.2	157	707.9	146
CER3535-A22-V1-50-A	5000	70	197.4	205	367.3	180	498.6	164	583.3	156	700.8	144
CER3535-A22-V1-57-A	5700	70	193.5	201	359.9	176	488.5	161	571.5	153	686.7	141
CER3535-A22-V1-65-A	6500	70	191.5	199	356.2	175	483.5	159	565.6	151	679.6	140

◆Spectral Distribution

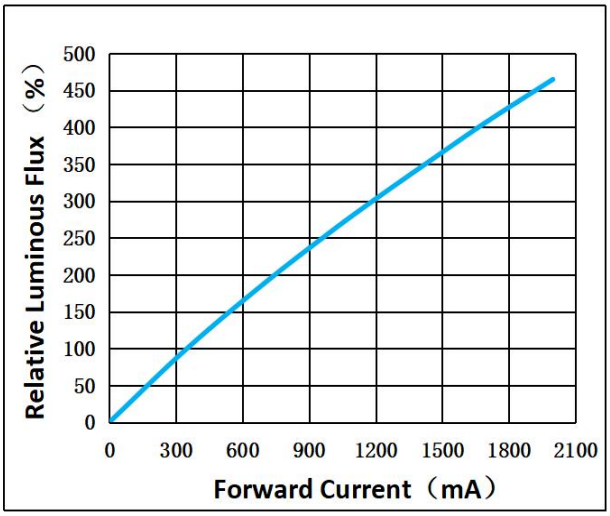


◆ Typical Optical Characteristic Curve (TA=25℃)

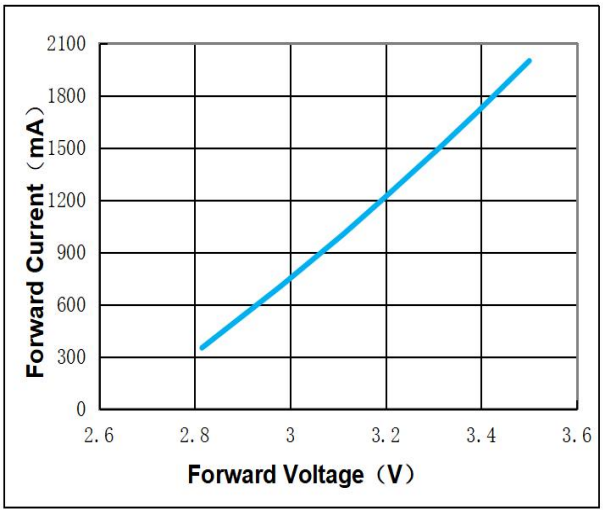
Relative Luminous Intensity VS Junction Temperature.



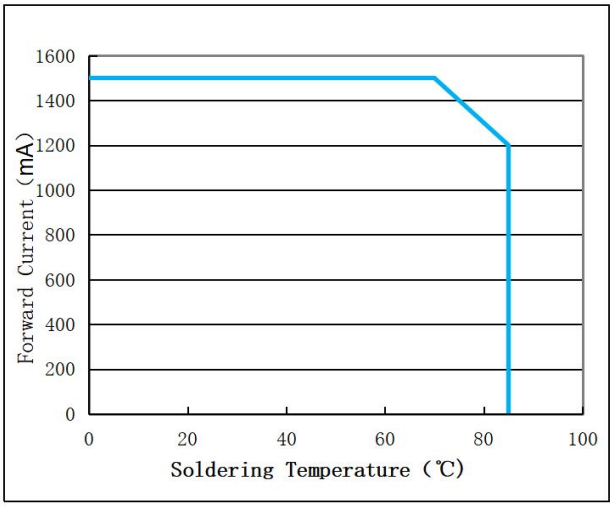
Relative Luminous Intensity VS Forward Current.



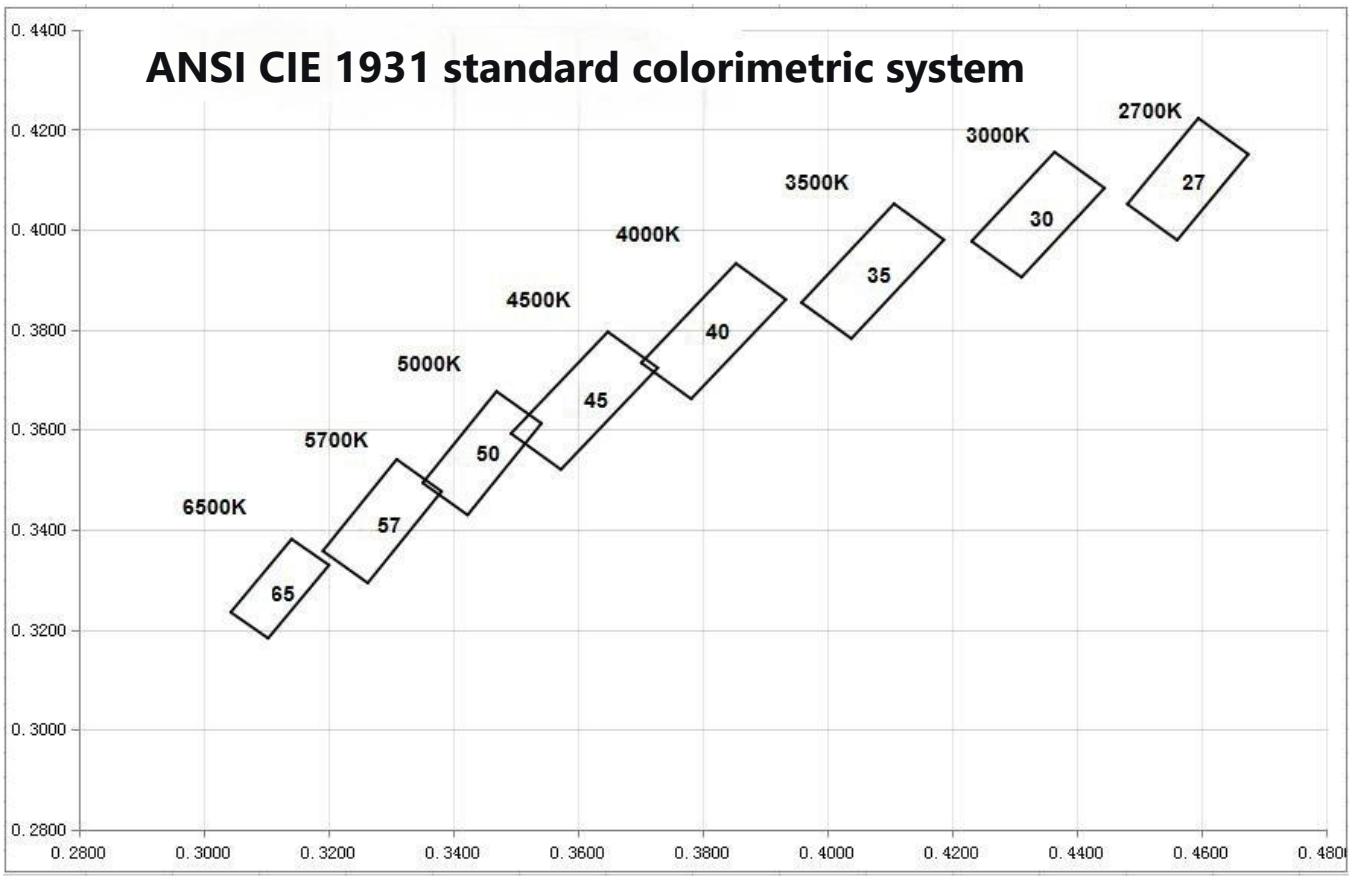
Forward Current VS Forward Voltage.



Forward Current VS Soldering Temperature.



◆CIE Chromaticity Diagram:(IF=350mA;TA=25℃)



◆ Color Rank :(IF=350mA;TA=25℃)

CODE	CCT	X	Y
27	2700K	0.4595	0.4223
		0.4481	0.4051
		0.4561	0.3979
		0.4675	0.4151

CODE	CCT	X	Y
30	3000K	0.4365	0.4155
		0.4231	0.3977
		0.4311	0.3905
		0.4445	0.4083

CODE	CCT	X	Y
35	3500K	0.4107	0.4052
		0.3959	0.3854
		0.4039	0.3782
		0.4187	0.3980

CODE	CCT	X	Y
40	4000K	0.3854	0.3932
		0.3702	0.3734
		0.3782	0.3662
		0.3934	0.3860

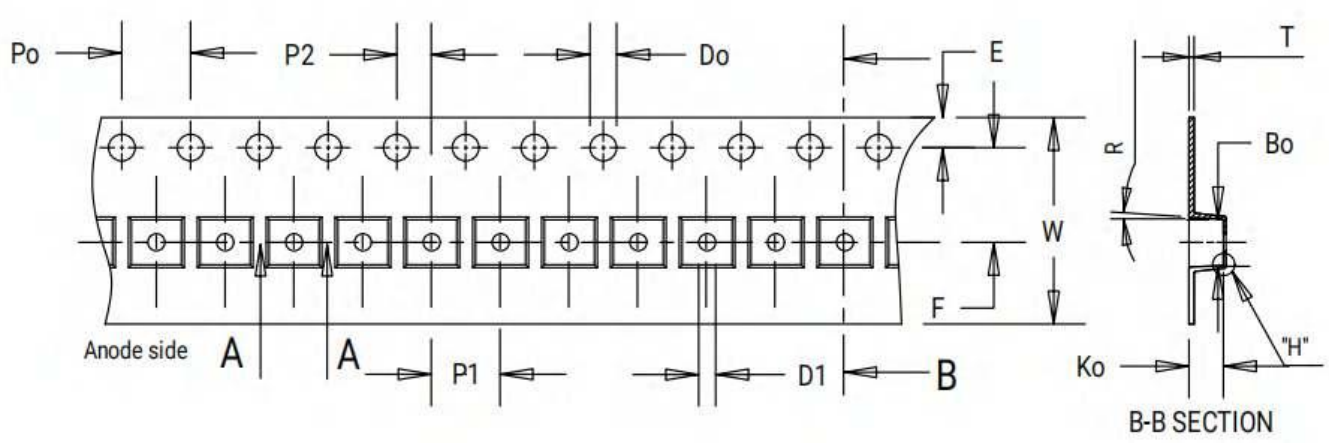
CODE	CCT	X	Y
50	5000K	0.3470	0.3677
		0.3352	0.3493
		0.3424	0.3429
		0.3542	0.3613

CODE	CCT	X	Y
57	5700K	0.3310	0.3541
		0.3192	0.3357
		0.3264	0.3293
		0.3382	0.3477

CODE	CCT	X	Y
65	6500K	0.3142	0.3381
		0.3044	0.3235
		0.3104	0.3183
		0.3202	0.3329

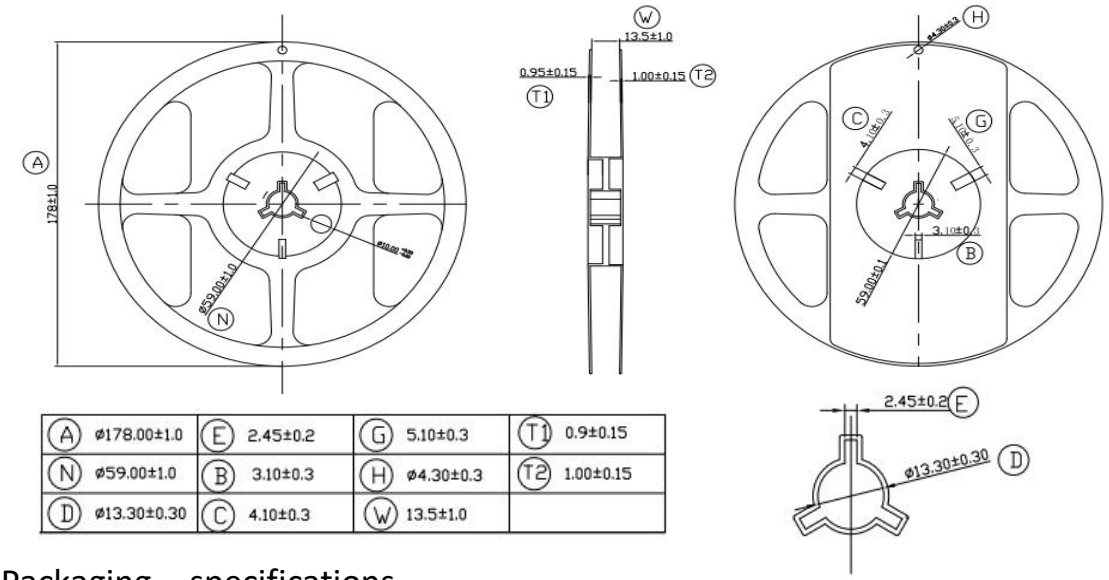
◆ Packaging Specifications

Dimensions of Tape ：



W	12.0±0.10	T	0.30±0.02	D1	1.50±0.10	Unit	MM
E	1.75±0.10	F	5.50±0.10	DO	1.55±0.10	Material	PC
PO	4.00±0.10	P1	8.00±0.10	P2	2.00±0.10	Model	3535
AO	3.70±0.10	BO	3.70±0.10	KO	2.40±0.10		

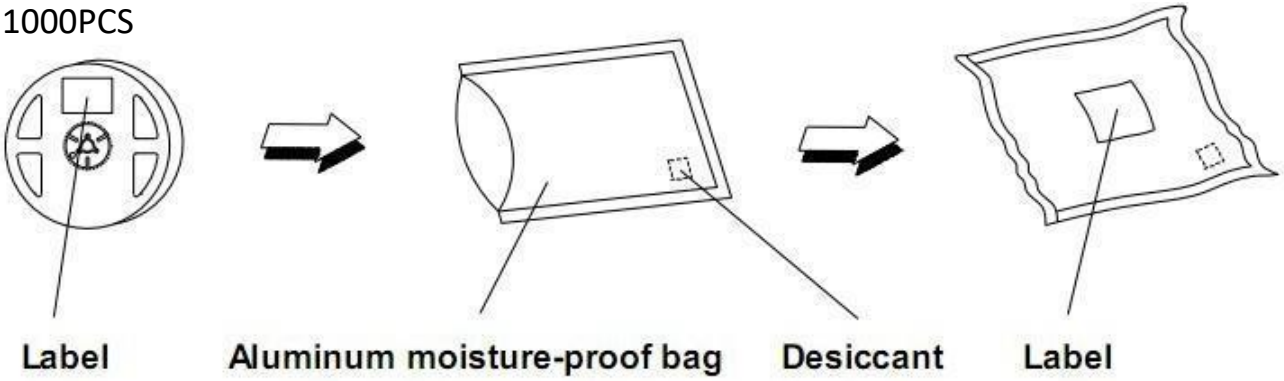
Dimensions of Reel 卷盘规格



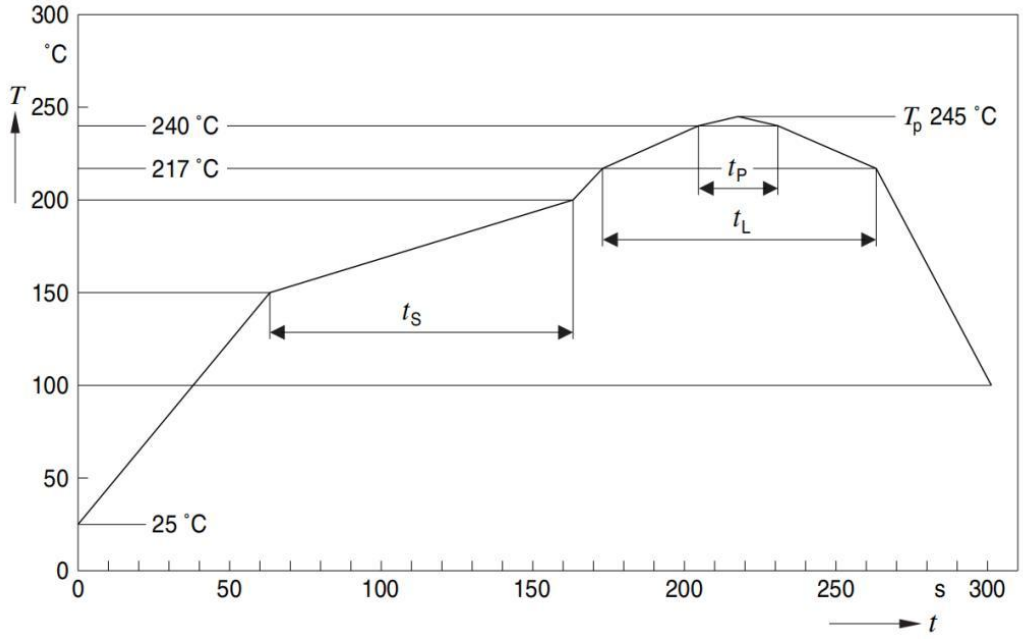
A	ø178.00±1.0	E	2.45±0.2	G	5.10±0.3	T1	0.9±0.15
N	ø59.00±1.0	B	3.10±0.3	H	ø4.30±0.3	T2	1.00±0.15
D	ø13.30±0.30	C	4.10±0.3	W	13.5±1.0		

Packaging specifications

1000PCS



◆ SMT Reflow Soldering Instructions SMT



1. Reflow soldering should not be done more than two times When soldering, do not put stress on the LEDs during heating

◆ Reliability Test Items and Conditions

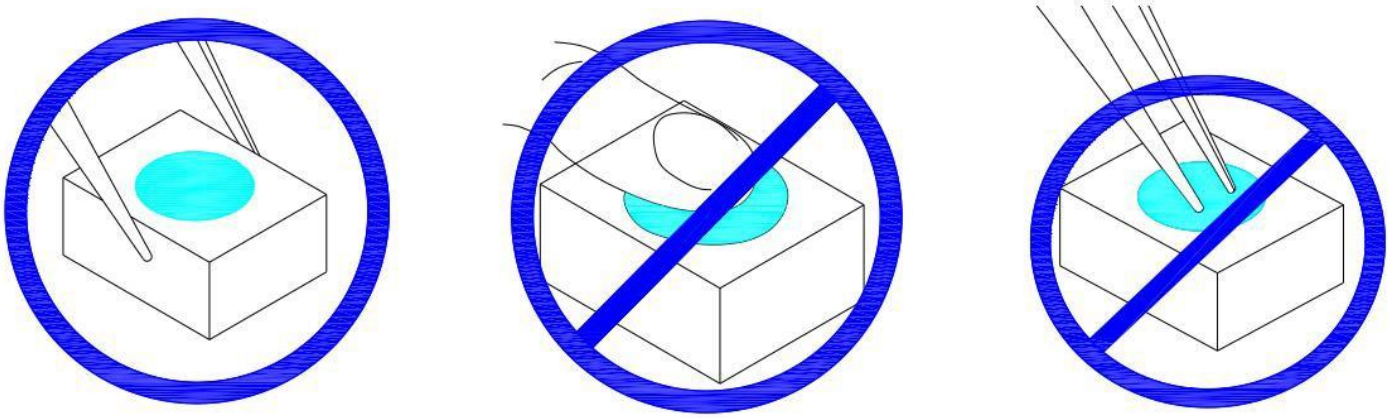
Test Item	Ref.Standard	Test Conditions	Time	Quantity（pcs）
High Temperature Storage	JESD22-A103	Temp:100℃±5℃	1000hrs	22
Low Temperature Storage	JESD22-A119	Temp:-40℃±5℃	1000hrs	22
Thermal Shock	JESD22-A104	100℃±5℃ 30min ↓↑15S-40℃±5℃ 30min	1000cycle	22
Reflow	JESD22-B106	Temp:max260℃ Time:10sec8min/cycl e	3cycle	22
LifeTest	JESD22-A108	Ta=25℃±5℃ IF=1500mA	1000hrs	22
High Temperature Life Test	JESD22-A108	Ta=105℃±5℃ IF=1500mA	1000hrs	22
High Temperature High Humidity Life Test	JESD22-A101	85℃±5℃/85%RH IF1500mA	1000hrs	22

◆CAUTIONS :

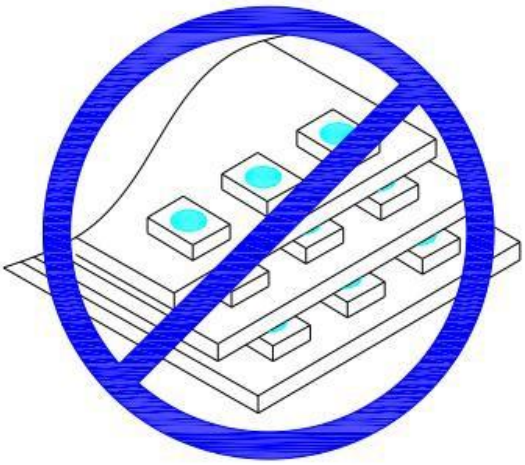
1，The encapsulated material of the LEDs is silicone. Therefore the LEDs have a soft surface on the top of package. The pressure to the top surface will be influence to the reliability of the LEDs. Precautions should be taken to avoid the strong pressure on the encapsulated part. So when use the picking up nozzle, the pressure on the silicone resin should be proper.

2，Compare to epoxy encapsulant that is hard and brittle, silicone is softer and flexible. Although itscharacteristic significantly reduces thermal stress, it is more prone to damage by external mechanical force . As a result, Special handling precautions must be observed during assembling using silicone encapsulated LED products, Failure to comply might leads to damage and premature failure of the LED.

①， Handle the component along the side surface by using forceps or appropriate tools; do not directly touch or Handle the silicone lens surface, it may damage the internal circuitry.



②， Do not stack together assembled PCBs containing LEDs. Impact may scratch the silicone lens or damage the internal circuitry.



3， Material confirmation. Whether the LED Bin specifications of the material are consistent , such as whether V_F, XY, brightness and so on belong to the same specification, the same specification should be used together, if not the same specification LED is applied to the same object, it should be evaluated first, (if different V_F or XY cast together may produce difference in brightness or color).

4， Packaging and storage 。

4.1 Before opening packaging, avoid moisture entry into LED. SMD series LED is suggested to be stored in a drying cabinet with built-in desiccant. The storage environment is 5-30 centigrade, no more than 50% humidity. If storage time is over 3 months, LED needs to be re dehumidifying (65 degrees centigrade for more than /24 hours).

4.2 Open the precautions after packing. LED is a surface mount. When the LED is welded, the internal separation of LED may occur. The luminescence efficiency is affected and the luminance decreases or the color variation. The following are the matters to be paid attention to:

A, Before opening the package, please check the packaging bag for air leakage. If there is any air leakage, please return it to our company to re-bake the dehumidifying package before use.

B， After opening the package, welding should be completed as soon as possible (within 12 hours).

C， The remaining materials are sealed or placed in an environment of 5~40 C and no more than 30% humidity.

D， If the open package is more than 24 hours (< 168 hours) or the humidity card is changed from blue to pink, LED needs to be dehumidifying again (65 degrees centigrade for more than /24 hours). If the package is opened for more than 168 hours, it is necessary to dismantle the tape and remove the moisture at 150℃ /2h.

4.3 LED electrode and bracket are made of silver plated copper alloy. The silver layer on the surface is easy to be affected by corrosive gases. Please avoid contacting with corrosive environment to cause LED discoloration, so as to avoid the poor weldability of LED and influence the photoelectric performance. Avoid sudden changes in temperature and humidity of the environment, especially under high humidity environment, easy to produce water vapor condensation.

5， Electrostatic protection. LED is a chip sensitive electronic component. Various measures should be taken to avoid static electricity, such as wearing an electrostatic bracelet or anti-static gloves during use. All devices, equipment and instruments should be well grounded.