APPROVAL SHEET

Part No: BL3010A-ZPD

NOTE :

Green Part

MAKER			CUSTOMER	
SOLIDLITE				
R&D	QA	Sales	Checked	Approved

Prepared	Checked	Approved
Rachel Lee	Sky Lin	Kenneth Wu

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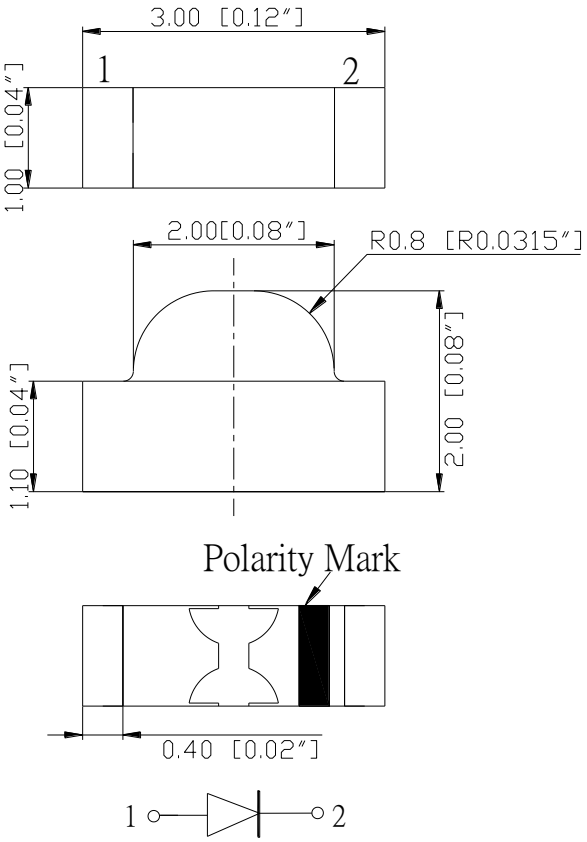
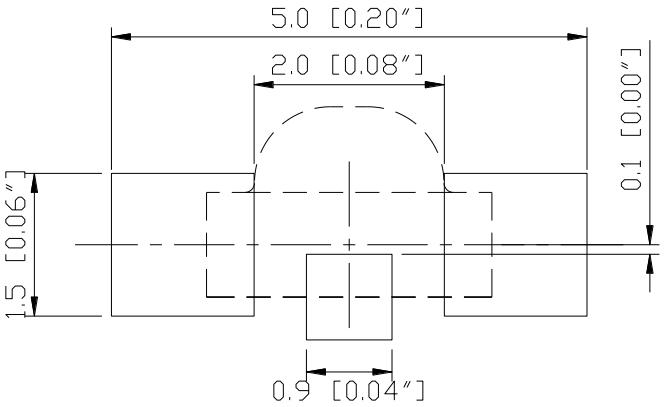
Package outlines



RECOMMEND PAD LAYOUT



ITEM	MATERIALS
Resin (mold)	Epoxy
Lens color	Black
Dice	Silicon

NOTES:
1. All dimensions are in millimeters (inches);
2. Tolerances are ±0.1mm (0.004inch) unless otherwise noted.

Absolute maximum ratings (T_A=25℃)

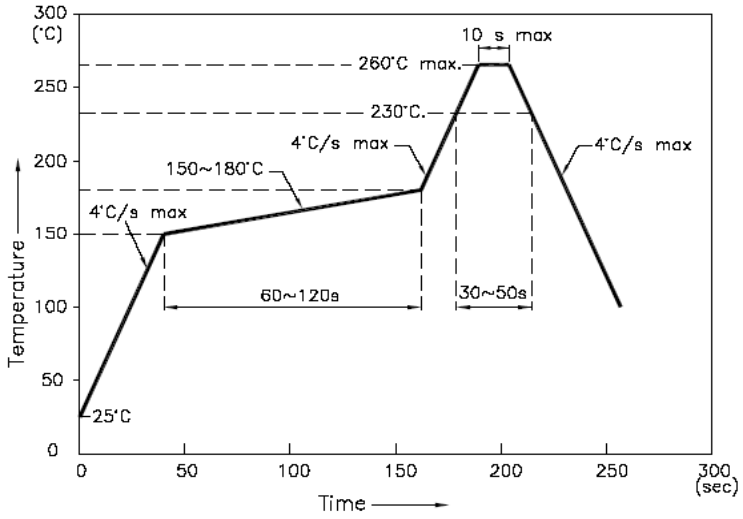
Parameter	Symbol	Value	Unit
Operating temperature range	Top	-40 ~+80	℃
Storage temperature range	Tstg	-40 ~+85	℃
Reverse voltage	Vr	35	V
Power dissipation at (or below) 25℃ free air temperature	Pd	150	mW

Electro-optical characteristics (T_A=25℃)

Parameter	Test Condition	Symbol	Value			Unit
			Min	Typ	Max	
Forward Voltage	IF=10mA H=0mw/cm^2	VF	0.5	-	1.3	V
Reverse breakdown voltage	I_R = 100μA H = 0mw/cm^2	$V_{(BR)R}$	35	-	-	V
Reverse dark current	V_R = 10V H = 0mw/cm^2	I_D	-	2	10	nA
Light Current	V_R = 5V H=as6mw/cm^2 @940nm	IL	-	5.8	-	μA
Junction Capacitance	V_R = 5V H = 0mw/cm^2 f = 1MHz	C_J	-	2	-	pF
Wavelength of Peak Sensitivity	-	λp	-	940	-	nm
Range of spectral response	-	λp	760	-	1150	nm

Reflow Profile

■ Reflow Temp/Time



NOTES:

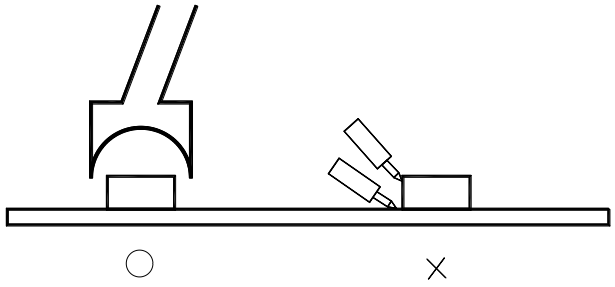
1. We recommend the reflow temperature 245℃(±5℃).the maximum soldering temperature should be limited to 260℃.
2. dont cause stress to the epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.

■Soldering iron

Basic spec is ≤ 5sec when 260℃. If temperature is higher, time should be shorter (+10℃→ -1sec).Power dissipation of iron should be smaller than 20W, and temperatures should be controllable .Surface temperature of the device should be under 230℃ .

■Rework

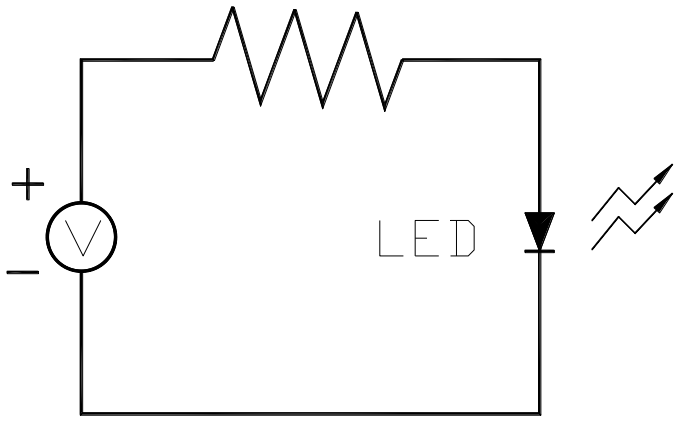
1. Customer must finish rework within 5 sec under 260℃.
2. The head of iron can not touch copper foil
3. Twin-head type is preferred.



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

Test circuit and handling precautions

■ Test circuit



. ■Handling precautions

1. Over-current-proof

Customer must apply resistors for protection; otherwise slight voltage shift will cause big current change (Burn out will happen).

2. Shelf life in sealed bag: 12 month at 5℃~30℃ and ＜60% R.H;

3. After the package is Opened:

3.1. It is recommended to baking before the first use:

Baking condition:

a. 60±5℃ x (24~48hrs) and ＜5%RH, taped reel type；

b. 110±5℃ x (8~16hr), bulk type；

3.2. The products should be used within a week and to be stored at ≦20% R.H. with zip-lock sealed:

a. Baking is required before soldering when the pack is unsealed after 24hrs；

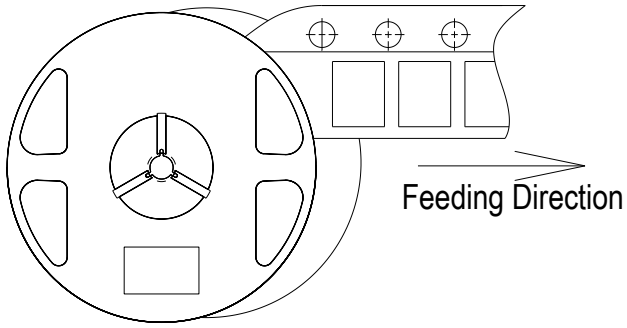
b. Baking condition as 3.1 baking condition..

Test items and results of reliability

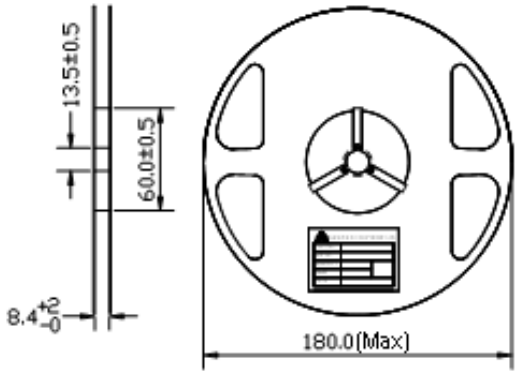
NO.	Test Item	Test Conditions	Test hours/cycle	Sample Size	Failure Judgment Criteria	Ac/Re
1	Solder Heat	T_a = 260℃ 5mm [0.20”] from body	5secs	22pcs	$I_L \leqq$ Lx 0.8 L: Lower Specification Limit	0/1
2	Temperature Cycle	-20℃ 30min ↑↓5min 80℃ 30min	100 cycle	22pcs		0/1
3	Thermal Shock	-20℃ 15min ↑↓ 80℃ 15min	100 cycle	22pcs		0/1
4	High Temperature Storage	T_a= 80℃	1000 hrs	22pcs		0/1
5	Low Temperature Storage	T_a= -30℃	1000 hrs	22pcs		0/1
6	High Temperature/ High Humidity	T_a=85℃ RH=85%	500 hrs	22pcs		0/1
7	DC Operating Life	V_{CE} = 5V T_a= 25℃ Ee=1mW/cm^2	1000 hrs	22pcs		0/1

3212 Series SMD Chip LED Lamps Packaging Specifications

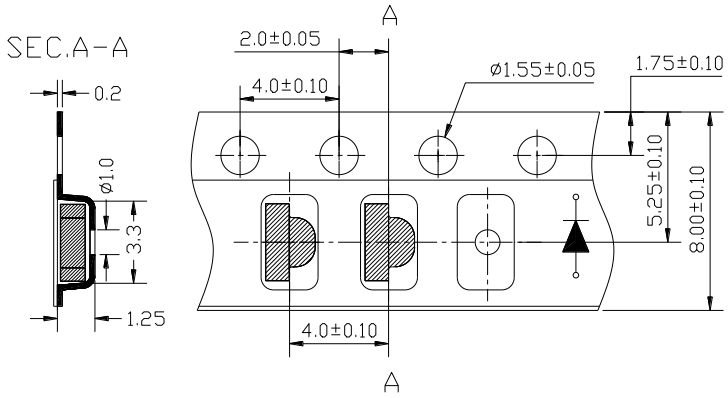
● Feeding Direction



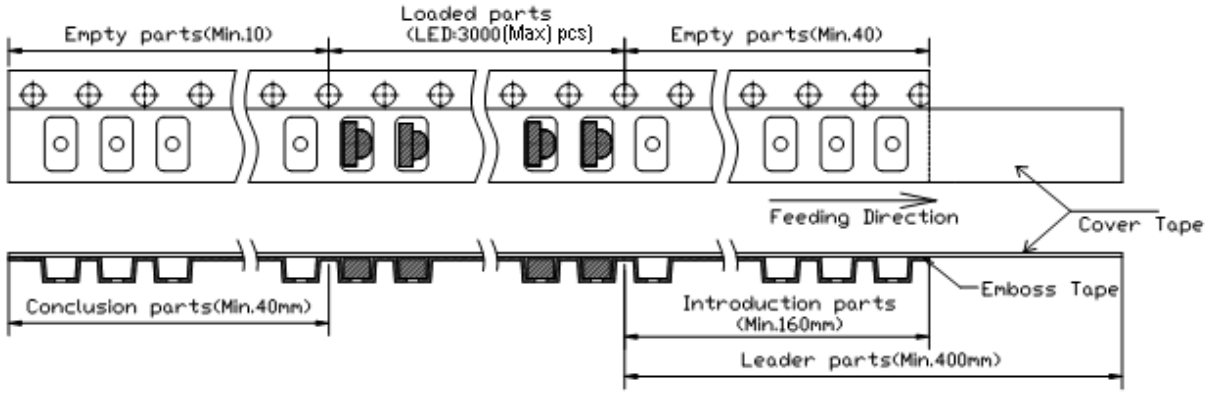
● Dimensions of Reel (Unit: mm)



● Dimensions of Tape (Unit: mm)



● Arrangement of Tape

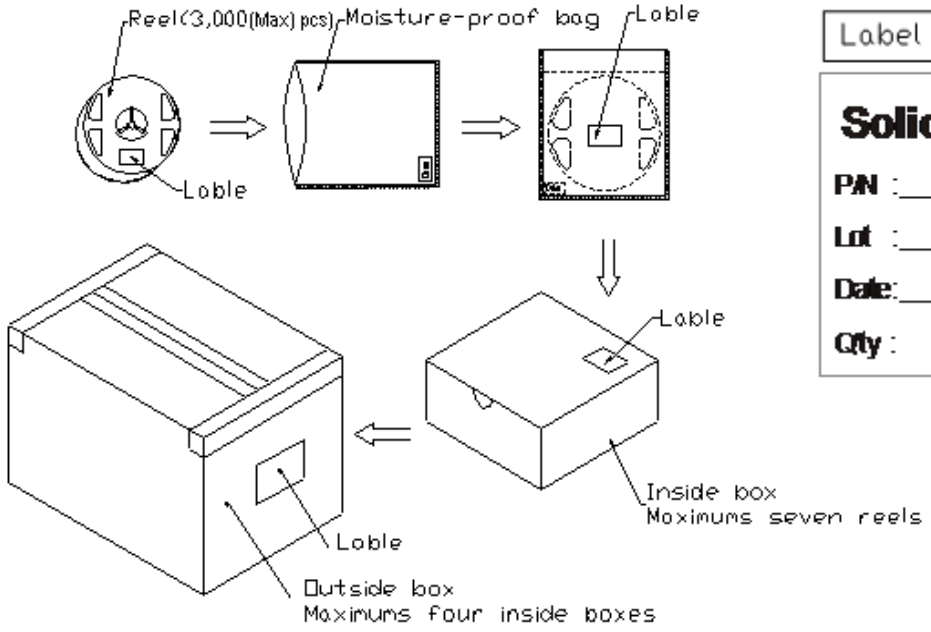


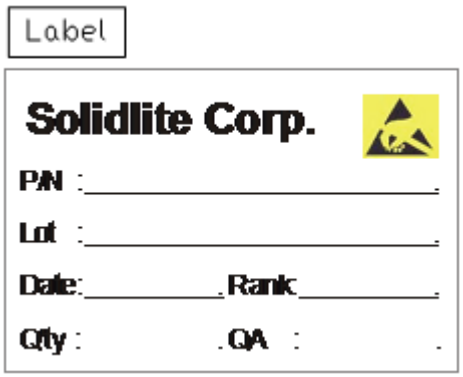
NOTES

1. Empty component pockets are sealed with top cover tape;
2. The maximum number of missing lamps is two;
3. The cathode is oriented towards the tape sprocket hole.
4. 3,000(Max)pcs/Reel

3212 Series SMD Chip LED Lamps Packaging Specifications

- **Packaging specifications**





NOTES:

Reeled products [numbers of products are 3,000(Max)pcs] packed in a seal off moisture-proof bag along with a desiccant one by one, Seven moisture-proof bag of maximums [total maximum number of products are 21,000(Max)pcs] packed in an inside box (size: about 238mm x about 194mm x about 102mm) and four inside boxes of maximums are put in the outside box (size: about 410mm x about 254mm x about 229mm) Together with buffer material, and it is packed. (Part No., Lot No., quantity should appear on the label on the moisture-proof bag, part No. And quantity should appear on the label on the cardboard box.) The number of the loading steps of outside box (cardboard box) has it to three steps..