苏州固锝电子股份有限公司

SUZHOU GOODARK ELECTRONICS CO., LTD

产品规格书

Specification

GOODARK型号

BZV55C2V4～BZV55C75

构造　　：稳压二极管

Construction : Small-Signal Diode

用途　　：稳压

Application　: Zener Rectifier

制造工厂（Manufacturer）:

苏州固锝电子股份有限公司

Suzhou Good-ark Electronics Co., Ltd

作成部门：产品开发事业部

Prepared: R & D Department

批准人　：蒋祖良

Confirmed：Z.L.Jiang

接受印栏

请记入贵公司的名称、接受日期、责任者人名。

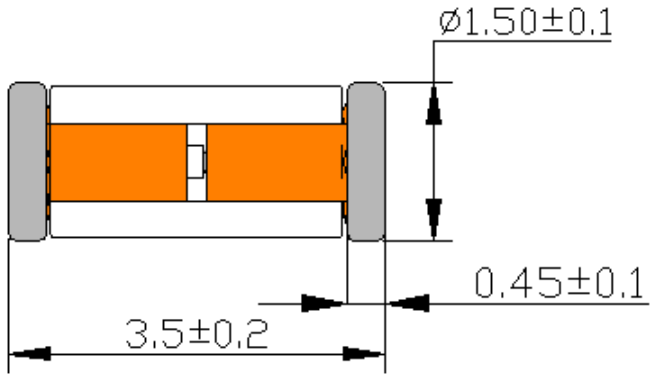
记载内容

CONTENTS

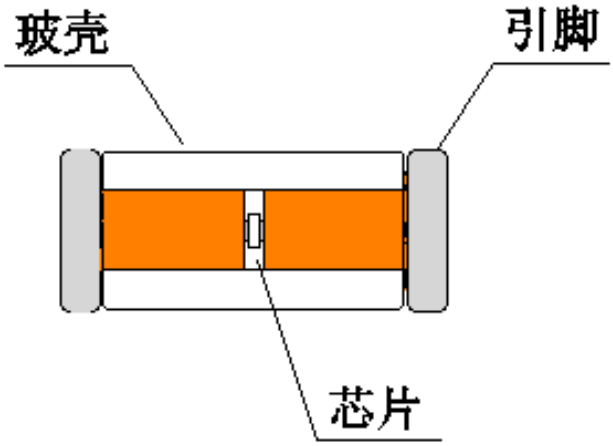
变 更 履 历

发行日	变更种类	变更号	变更内容	实施日期

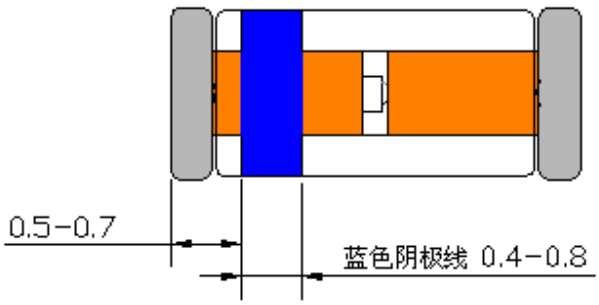
1.外形规格 CASE DIMENSION (Mini MELF Type) Unit mm



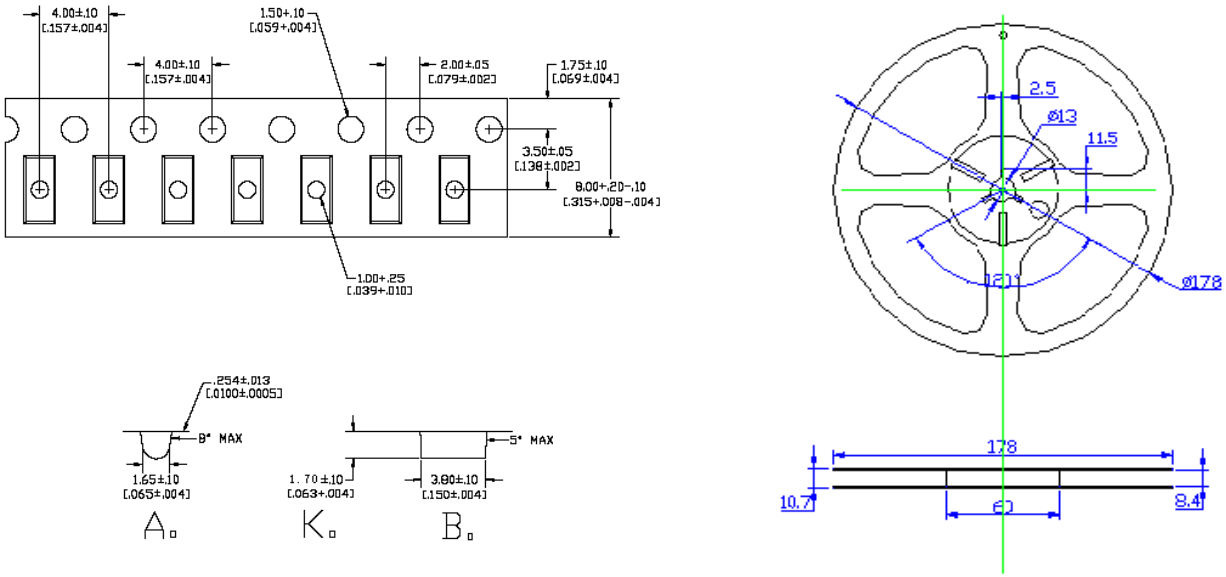
2.内部结构 BOSOM FRAME



3.印字规格 MARKING



4.编带规格 TAPING SPECIFICATION，厚度：0.25±0.1mm，单位：mm。



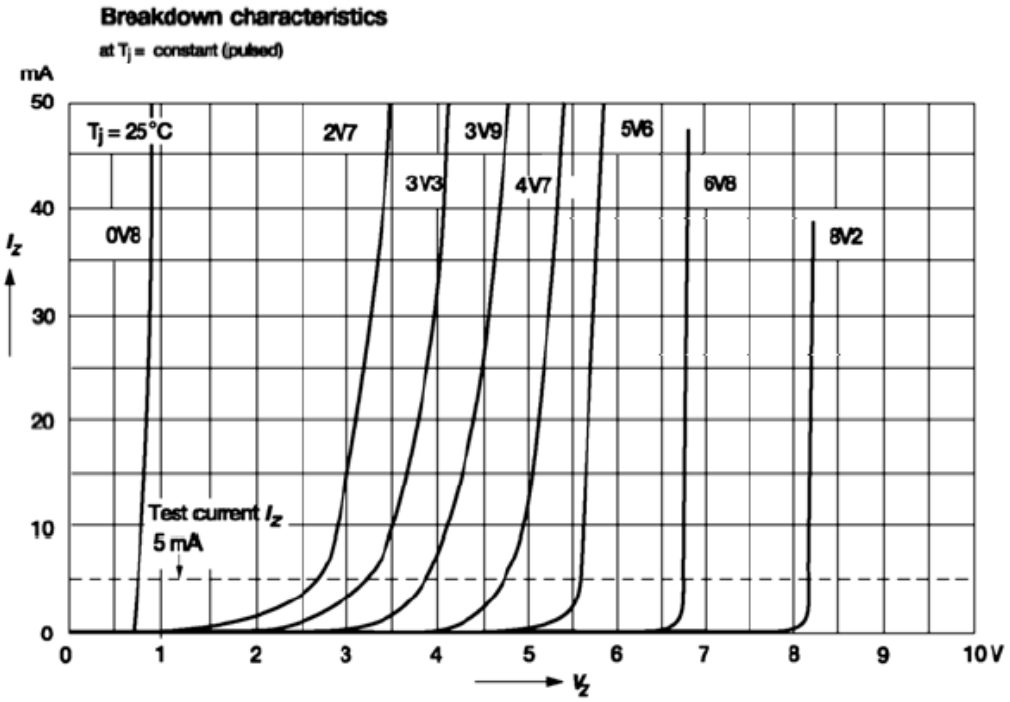
5.最大定格 ABSOLUTE MAXIMUM RATING（Ta=25℃）

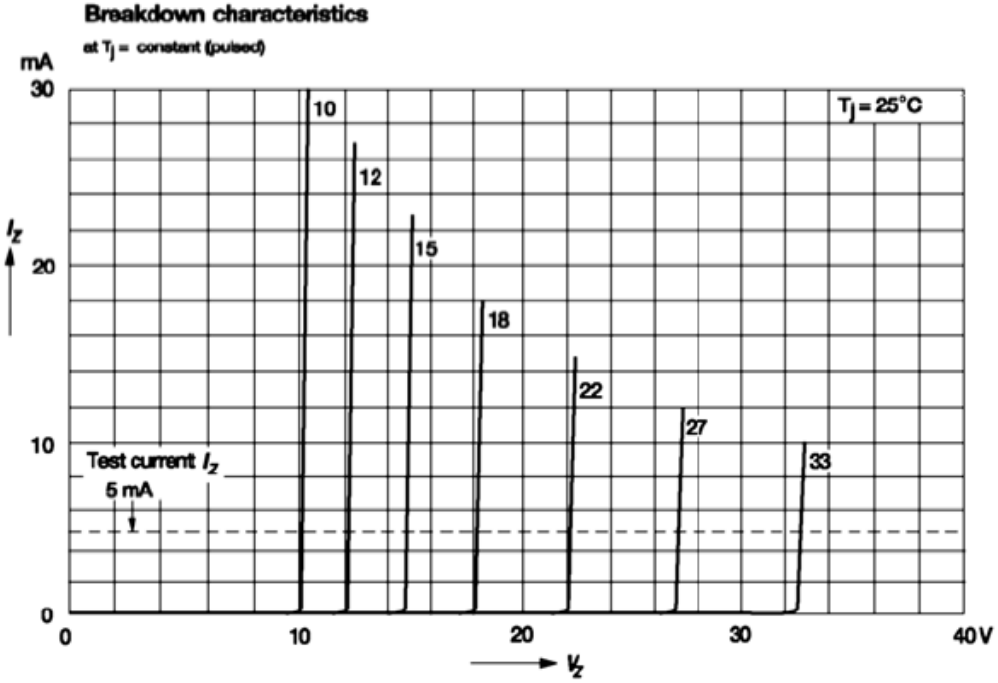
项目 ITEM	符号 SYMBOL	定格 LIMIT	单位 UNIT
许容损失 Power Dissipation Tamb=25℃	Ptot	500	mW
接合温度 Maximum Junction Temperature	Tj	175	℃
保存温度范围 Storage Temperature	Tstg	-55～175	℃

6.电气特性 ELECTRICAL CHARACTERISTICS （Ta=25℃）

序号	参数 / 规格	@IZ（mA）	Vz (v) Min	Vz (v) Max	@IzT (mA)	ZzT ohms (Max)	@IzK (mA)	ZzK ohms (Max)	@VR (V)	IR(uA) Max	@IF（mA）	VF(V) Max
1	BZV55C 2V4	5	2.20	2.60	5	100	1	600	1	50	10	0.9
2	BZV55C 2V7	5	2.50	2.90	5	100	1	600	1	20	10	0.9
3	BZV55C 3V0	5	2.80	3.20	5	95	1	600	1	10	10	0.9
4	BZV55C 3V3	5	3.10	3.50	5	95	1	600	1	5	10	0.9
5	BZV55C 3V6	5	3.40	3.90	5	90	1	600	1	5	10	0.9
6	BZV55C 3V9	5	3.70	4.10	5	90	1	600	1	3	10	0.9
7	BZV55C 4V3	5	4.00	4.60	5	90	1	600	1	3	10	0.9
8	BZV55C 4V7	5	4.40	5.00	5	80	1	500	2	3	10	0.9
9	BZV55C 5V1	5	4.80	5.40	5	60	1	480	2	2	10	0.9
10	BZV55C 5V6	5	5.20	6.00	5	40	1	400	2	1	10	0.9
11	BZV55C 6V2	5	5.80	6.60	5	10	1	150	4	3	10	0.9
12	BZV55C 6V8	5	6.40	7.20	5	15	1	80	4	2	10	0.9
13	BZV55C 7V5	5	7.00	7.90	5	15	1	80	5	1	10	0.9
14	BZV55C 8V2	5	7.70	8.70	5	15	1	80	5	0.7	10	0.9
15	BZV55C 9V1	5	8.50	9.60	5	15	1	100	6	0.5	10	0.9
16	BZV55C 10	5	9.40	10.60	5	20	1	150	7	0.2	10	0.9
17	BZV55C 11	5	10.40	11.60	5	20	1	150	8	0.1	10	0.9
18	BZV55C 12	5	11.40	12.70	5	25	1	150	8	0.1	10	0.9
19	BZV55C 13	5	12.40	14.10	5	30	1	170	8	0.1	10	0.9
20	BZV55C 15	5	13.80	15.60	5	30	1	200	10	0.05	10	0.9
21	BZV55C 16	5	15.30	17.10	5	40	1	200	11	0.05	10	0.9
22	BZV55C 18	5	16.80	19.10	5	45	1	225	13	0.05	10	0.9
23	BZV55C 20	5	18.80	21.20	5	55	1	225	14	0.05	10	0.9
24	BZV55C 22	5	20.80	23.30	5	55	1	250	15	0.05	10	0.9
25	BZV55C 24	5	22.80	25.60	5	70	1	250	17	0.05	10	0.9
26	BZV55C 27	2	25.10	28.90	2	80	0.5	300	19	0.05	10	0.9
27	BZV55C 30	2	28.00	32.00	2	80	0.5	300	21	0.05	10	0.9
28	BZV55C 33	2	31.00	35.00	2	80	0.5	325	23	0.05	10	0.9
29	BZV55C 36	2	34.00	38.00	2	80	0.5	350	25	0.05	10	0.9
30	BZV55C 39	2	37.00	41.00	2	90	0.5	350	27	0.05	10	0.9
31	BZV55C 43	2	40.00	46.00	2	130	0.5	375	30	0.05	10	0.9
32	BZV55C 47	2	44.00	50.00	2	170	0.5	375	33	0.05	10	0.9
33	BZV55C 51	2	48.00	54.00	2	180	0.5	400	36	0.05	10	0.9
34	BZV55C 56	2	52.00	60.00	2	200	0.5	425	39	0.05	10	0.9
35	BZV55C 62	2	58.00	66.00	2	215	0.5	450	43	0.05	10	0.9
36	BZV55C 68	2	64.00	72.00	2	240	0.5	475	48	0.05	10	0.9
37	BZV55C 75	2	70.00	79.00	2	255	0.5	500	53	0.05	10	0.9

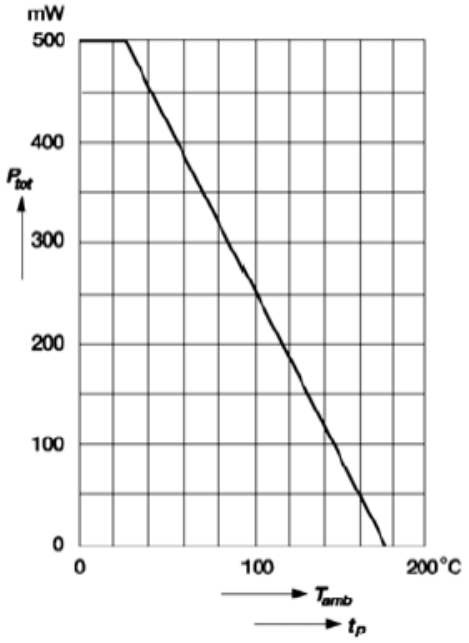
7. 特性曲线 RATINGS AND CHARACTERISTIC CURVES（Ta=25℃）



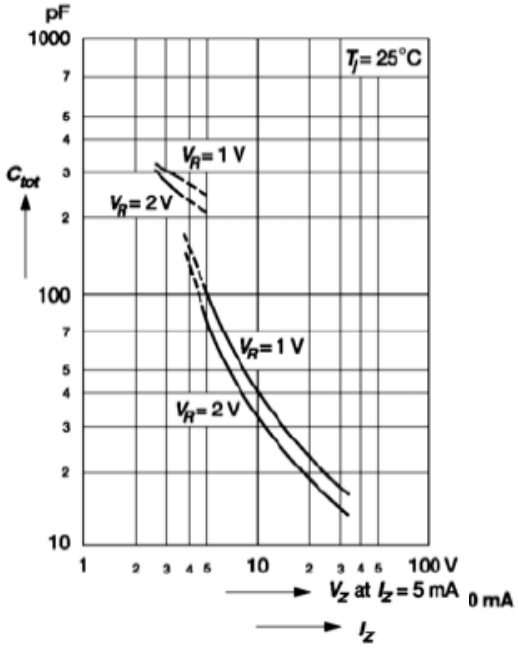


Admissible power dissipation versus ambient temperature

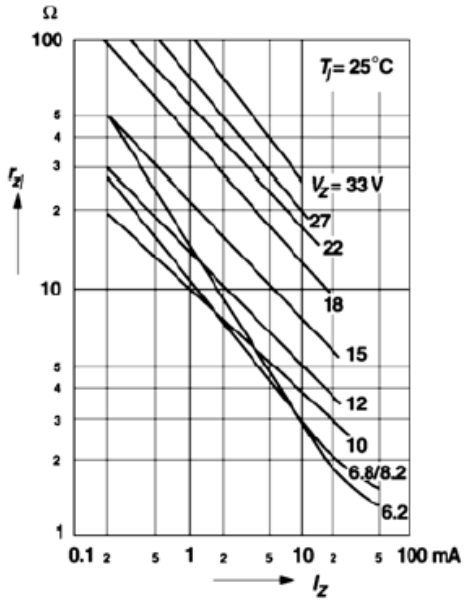
Valid provided that leads are kept ambient temperature at a distance of 8 mm from case.



Capacitance versus Zener voltage

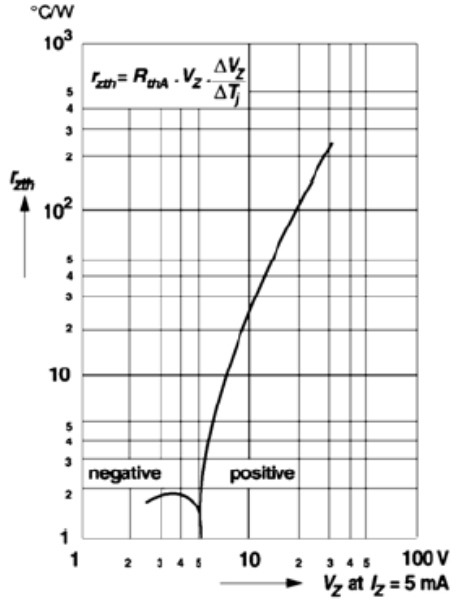


Dynamic resistance versus Zener current

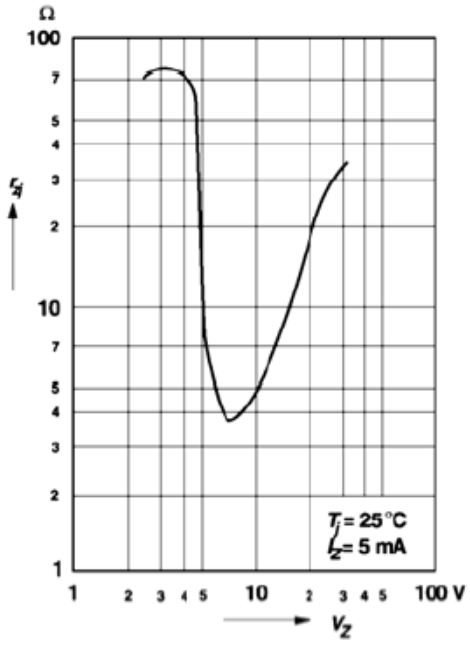


Thermal differential resistance versus Zener voltage

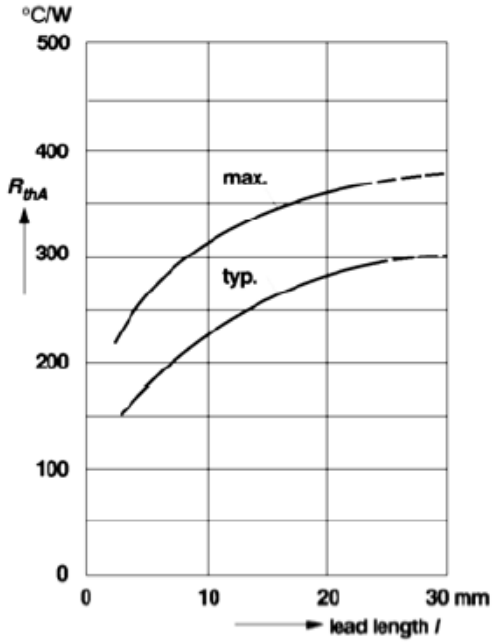
Valid provided that leads are kept at ambient temperature at a distance of 8 mm from case.



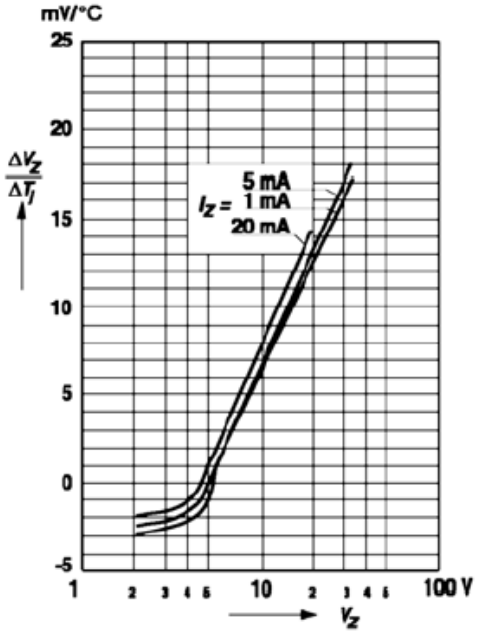
Dynamic resistance versus Zener voltage

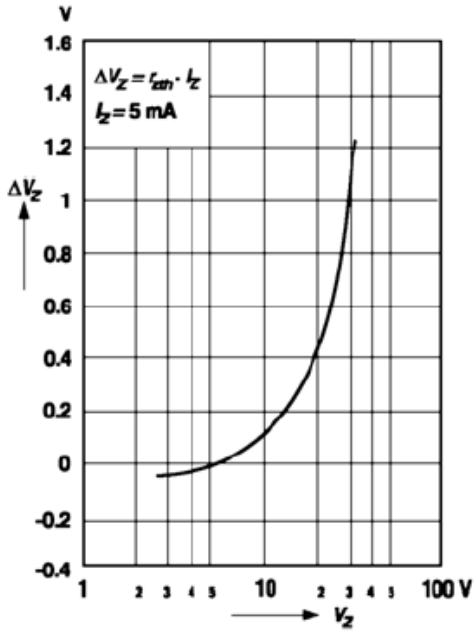


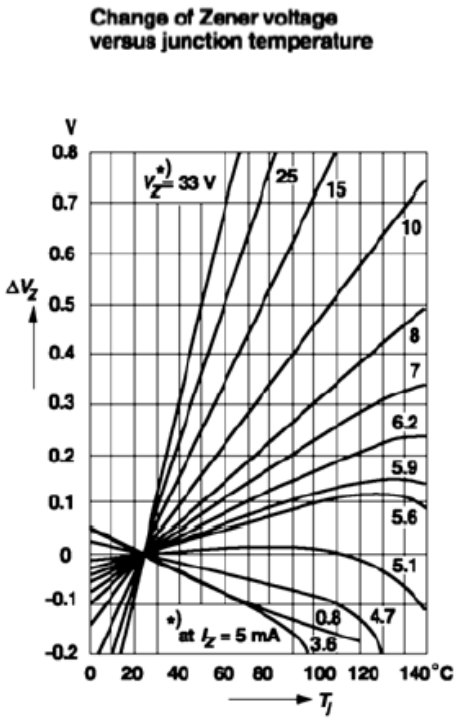
Thermal resistance versus lead length



versus Zener voltage







8.包装规格 PACKAGING SPECIFICATION

8.1 卷盘、内盒、外箱标贴式样及说明见下表:

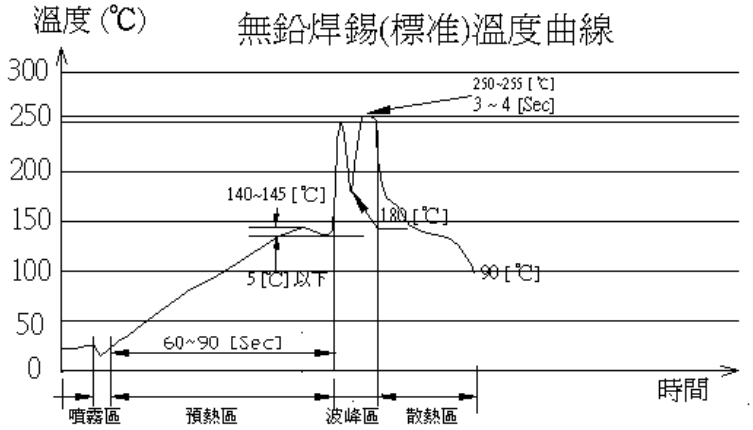
序号	材料包装形式	卷盘/内盒标贴尺寸	卷盘/内盒标贴内容说明	外箱标贴尺寸	外箱标贴内容说明
1	LL-34	卷盘65*30mm 	DEVICE：规格 QTY：数量 LOT NO：生产批号 QC：PASS章	101*76mm 	DEVICE：规格 CASE：封装形式 QTY：数量 DATE：生产周期 CO/NO：箱号 N.W.净重 G.W.毛重 P/O NO：定单号 QA：PASS章
		内盒100*60mm 	DEVICE：规格 CASE：封装形式 QTY：数量 LOT NO：批号 QC：PASS章		

8.2 卷装包装规范见下表:

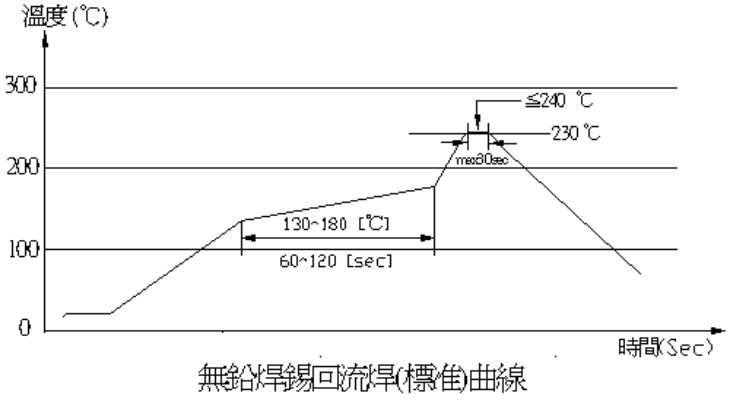
	外形尺寸mm	数量	产品装置	标贴位置
内盒	194×185×120	25000PCS/盒	 1列10层叠放	 贴在盒体侧面左上角，盒体上印刷有pb-free无铅标识。
外箱	395×265×223	100000PCS/箱	 横放2排1层	 贴在箱体侧面左上角，印刷有GOOD-ARK 黄胶带封口，箱体上印刷有pb-free无铅标识。

9. 其他项目 OTHER ITEM。

9.1 焊接温度



Wave Soldering profile



Reflow Soldering profile

9.2 焊接注意事项

⑴ 手工焊接的烙铁顶端温度（接触部位）在360℃以下、5秒以内；

⑵ 不要将烙铁顶端直接接触玻壳等；

⑶ 焊接过程中，260℃下的时间不得超过10秒；

⑷ 焊接后不要急冷，要自然冷却；

⑸ 焊接过程中和刚焊接好时，应避免任何力作用在本体和引线上；

⑹ 焊接结束后，不要推拉或扭动本体来纠正焊接位置；

10 .可靠性试验 QUALITY ASSURANCE TEST CONDITION

Test Items and its conditions

Sort	Test items	Conditions	Tested sample quantity	Failed quantity
Life test	Forward Ope. Life Test Test	Ta=25℃, Ptot: 80% t:1000hrs	22	0
	HTRB	V_{BR}:80%(V); T_A:125℃, t:1000hrs	22	0
	High temperature storage test	T_A:200℃, t:1000 hrs	22	0
	Damp-heat steady-state test	TA:85℃, RH85%, t:1000hrs	22	0
	PCT	121℃, 2.15atm, 24hrs	22	0
Environmental test	Resistance to soldering heat test A	260℃, 10Sec, 1~1.5mm	22	0
	Resistance to soldering heat test B	310℃, 3Sec, 1~1.5mm	22	0
	Thermal shock	0℃, 30Sec, 100℃, 30 sec, within 3Sec, 10 cycles	22	0
	Temperature cycling	-65℃(30min)→25℃(10min) →175℃(30min) →25℃(10min) 5 cycles	22	0
	Solderability	Baking: 150℃ 4hrs; tin dipping: 230℃, 5sec	22	0
Mechanical test	Dropping test	75cm, wooden floor, free fall, 3 times	22	0

Estimation Standards

Items	Measurement Condition	Symbol	Allowable Value		Units
			Min.	Max.	
Forward Voltage	Due to the individual specification	VFM	—	U×1.1	V
Reverse Current	Ditto	IRM	—	U×2	μA
Zener Voltage	Ditto	Vz	99%×U	101%×U	V

U shows the value the individual specification.