SPECIFICATION FOR APPROVAL
承 認 書

Description : SMD Piezo Buzzer

Part No : KLJ-1102

Customer's Model No :

Specification No : KLJ-1102

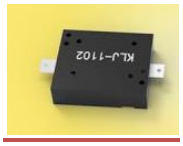
Number Of The Edidion : 3.1

CUSTOMER'S APPROVED SIGNATURE		

常州市凯丽金电子有限公司 CHANGZHOU KELIKING ELECTRONICS CO., LTD
公司地址：常州市天宁区恒生科技园 1-1301，Company ADD：Hengsheng1-1301 Science Park, Tianning District, Changzhou City
工厂地址:常州市天宁区三河口东塘路 1-1 号,Factory:Dongtang Road NO.1-1 sanhekou Tianning District Changzhou City
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Approved by	Checked by	Lssued by

A.SCOPE 範疇

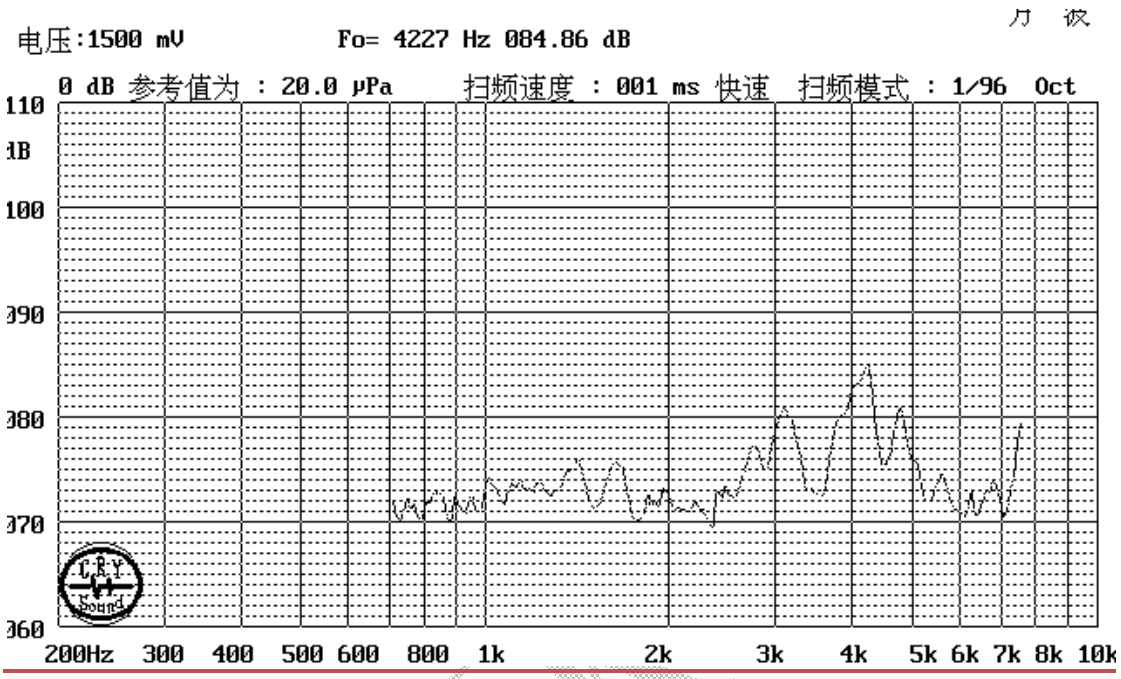


This specification applies SMD Piezo buzzer.KLJ-1102

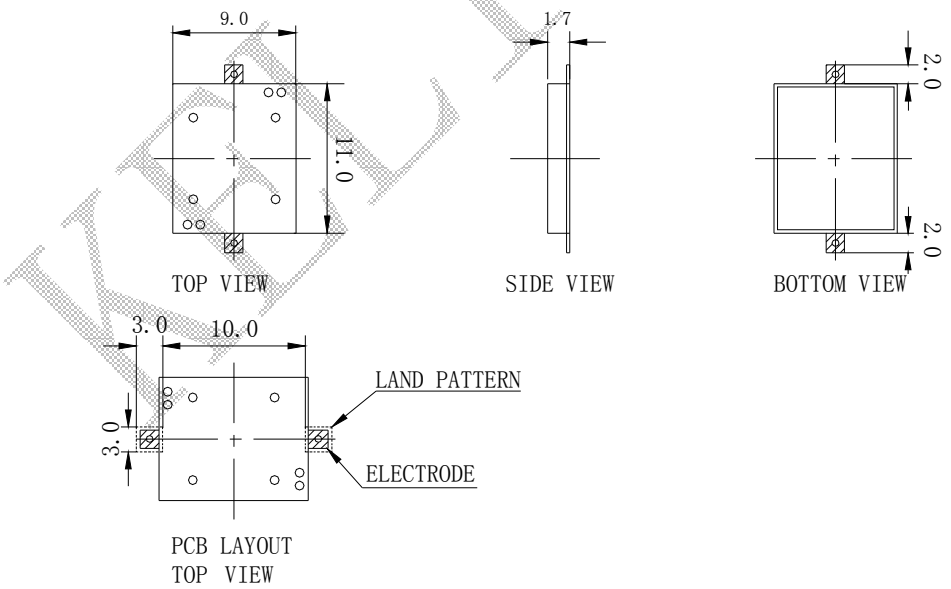
B.SPECIFICATION 规格

NO.	Item	Unit	Specification	Condition
1	Operating Voltage 工作電壓	Vp-p	Max20Vp-p	
2	Rated Voltage 操作電壓	Vp-p	5	
3	Mean Current 平均耗電流	mA	2	Applying rated voltage. 4100HZ squar wave. 1/2duty 施以額定電壓.4100HZ.方波.50%負載
4	Capacitance at 1KHz 电容量	pF	12000±30%	
5	Sound Output 輸出音壓	dB	Min.78	Distance at 10cm (A-weight). Applying rated voltage 4100HZ.square wave.1/2duty 在 10cm 處，施以額定電壓。4100HZ.方波.50%負載
6	Rated Frequency 額定頻率	HZ	4100	
7	Operating Temp 操作温度	℃	-35 ~+80	
8	Storage Temp 儲存温度	℃	-45 ~+85	
9	Dimension 尺寸	mm	L11×W9×H1.7	See attached drawing. 請參照外觀尺寸圖
10	Weight 重量	gram	0.6	
11	Material 材質		L.C.P (Black)	
12	Terminal 端子		SMD type (鍍全錫/Plating Sn)	See attached drawing. 請參照外觀尺寸圖
13	Environmental Protection Regulation 环保法规		RoHS	
14	Storage life 保存期限	month	6	6 months preservation at room temp.(25±3℃). Humidity30% 在室温下 25±3℃. 湿度 30%以下可保存 6 個月

C.TYPLCAL FREQUENCY RESPONSE CURVE 頻率響應曲線



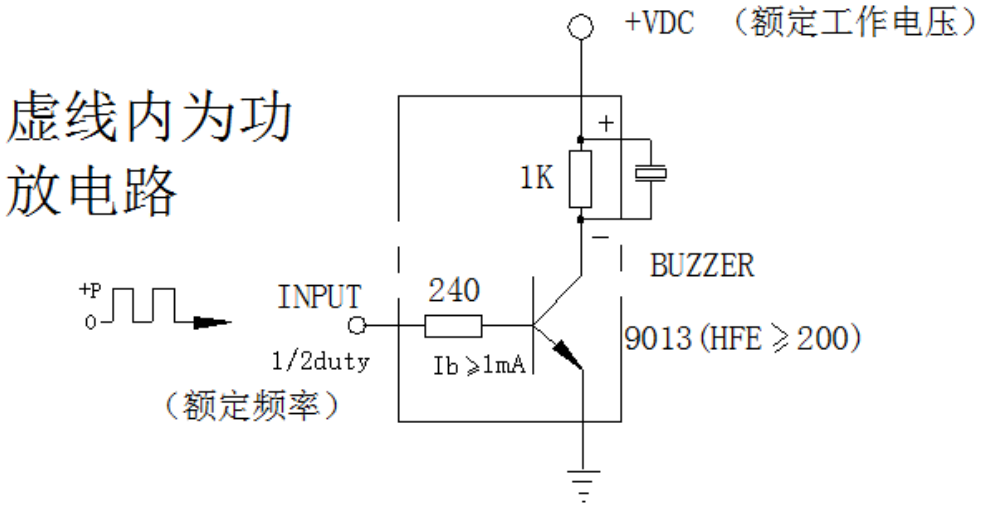
D.APPEARANCE DRAWING 外觀尺寸圓



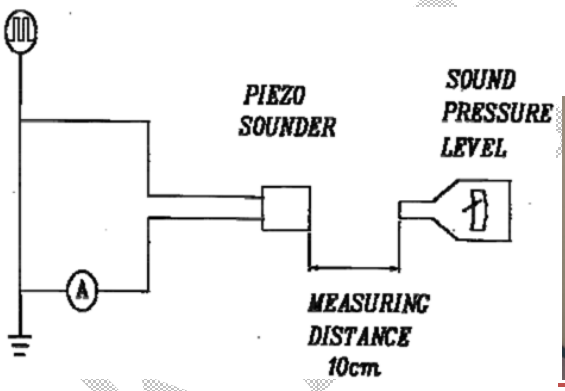
Tol:±0.2

Unit:mm

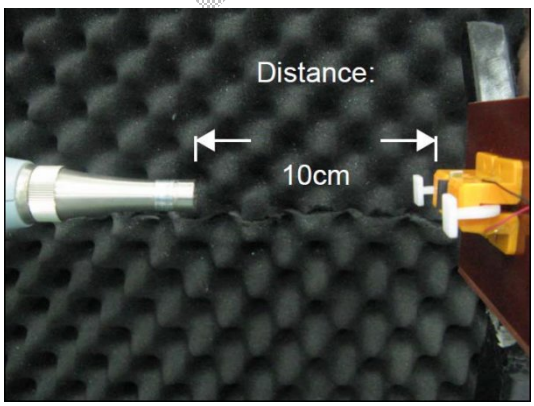
E.MEASUREMENT METHOD　测量方式



F.INSPECTION FIXTURE　测試架



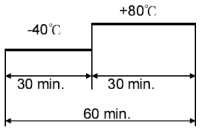
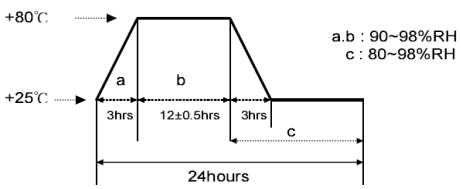




G.MECHANICAL CHARACTERISTICS 機械特性

NO.	Item	Test condition	Evaluation standard
1	Solderability 焊錫附著性	Lead terminals are immersed in solder bath of +260±5℃ for3±1 Second. 端子置於錫膏內. 錫膏溫度：+260±5℃. 焊接時間：3±1 秒	95% surface of lead pads must be covered with fresh solder 锡膏需覆盖端子上方 95%
2	Soldering Heat Resistance 焊錫耐熱性	The product is followed the reflow temperature curve to test Its reflow thermostability 產品依照迴焊溫度曲線測試迴焊耐熱性	No interference in operation 操作上无任何不良
3	Terminal Mechanical Strength 端子強度	Lead pads shall be soldered on the pc board.and the force9.8N (1.0kg)shall be applied behind the part for 10 seconds 將端子焊在 PC 板上后，對單體施以 9.8N（1.0kg）拉力 10 秒	No damage and cutting of 端子不松动，不脱落
4	Vibration 震動測試	Buzzer shall be measured after being applied vibration of amplitude of 1.5mm with 10 to 55hz band of vibration frequency to each of 3per-pendicular directions for 6 hours 震動週波數 10~55HZ.全振幅 1.5mm 于 X.Y.Z 3 個方向.各 6 小時	After the test the part shall meet specifications With-out any damage in appearance and the SPL Should be in±10dBA compared with initial one 经测试后，单体除音壓外外觀及电气特性须符合规格，輸出音壓变化量须±10dBA 内
5	Drop test 落下測試	The part only shall be dropped from a height of 75cm onto a 40mm thick wooden board 3 times in 3 axes(X.Y.Z).(a total of 9 times). 單體從 75 公分高處.X.Y.Z. 3 個方向.各 3 回.落于 40mm 厚木板上.	

H.ENVIRONMENT TEST 环境测试

NO.	Item	Test condition	Evaluation standard
1	High temp test 高温测试	After being placed in a chamber at +80℃ for 48 hours. 置于+80℃环境中 48 小时	After the test the part shall meet specifications with-out any degradation in appearance and performance except SPL. After 4 hours at +25℃. the SPL should be in±10dBA compared with initial one 经测试后，静置于+25℃（室温）环境中 4 小时候，单体除音壓外，外觀及电气特性须符合规格，輸出音壓变化量需在±10dBA 内
2	Low temp test 低温测试	After being placed in a chamber at -40℃ for 48 hours. 置于-40℃环境中 48 小时	
3	Therman Shock 热冲擊实验	The part shall be subjected to 10 cycles.One cycle shall consist of: 对单体施以热冲击实验 10 次循环.其循环内容如图示 	
4	Temp./Humidity Cycle 温度/湿度循环测试	The part shall be subjected to 10 cycles. One cycle shall be 24 hours and consist of 单体承受温度/湿度循环测试 10 次.其循环内容如图示 	

I.RELIABILITY TEST 信赖性测试

No.	Item	Test condition	Evaluation standard
1	Operating life test 寿命测试	1. Ordinary temperature 室温寿命测试 The part shall be subjected to 100 hours at room temperature with 3.0V.4000HZ applied (+25±10℃)下.输入 3.0V.4000HZ 连续操作 100 小时 2. High temperature 高温寿命测试 The part shall be subjected to 50 hours at +55℃ with 3.0V.4000HZ applied 在+55℃环境下，输入 3.0V.4000HZ 连续操作 50 小时 3. Low temperature 低温寿命测试 The part shall be subjected to 50 hours at -30℃ with 3.0V.4000HZ applied 在-30℃环境下，输入 3.0V.4000HZ 连续操作 50 小时	After the test the part shall meet Specifications with-out any degradation in appearance and Performance except. SPL. after 4 hours at +25℃. the SPL. should be in +10dBA compared with initial one. 经测试后，静置于+25℃（室温）环境中 4 小时后，单体除音壓外，外觀及电气特性须符合规格，輸出音壓变化量需在±10dBA 内

TEST CONDITION.

Standard Test Condition : a) Temperature:+5~+35℃ b)Humidity:45-85% c)Pressure:860-1060mbar

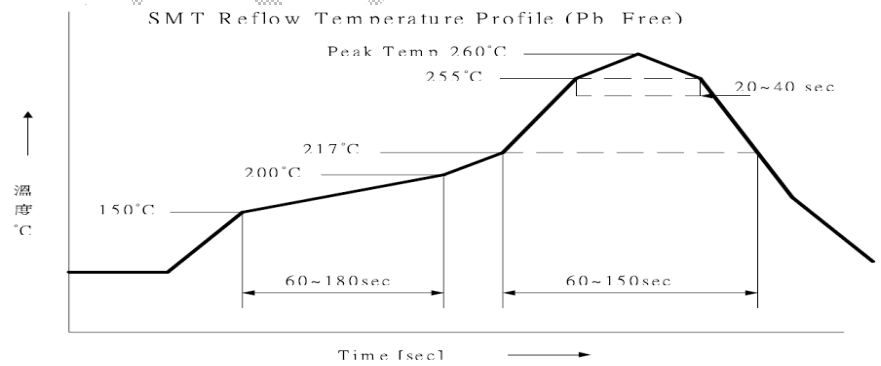
一般测试条件 : a）温度：+5~+35℃ b)湿度:45-85% c)气压：860-1060mbar

Judament Test Condition: a)Temperature:+25±2℃ b)Humidity:60-70% c）Pressure:860-1060mbar

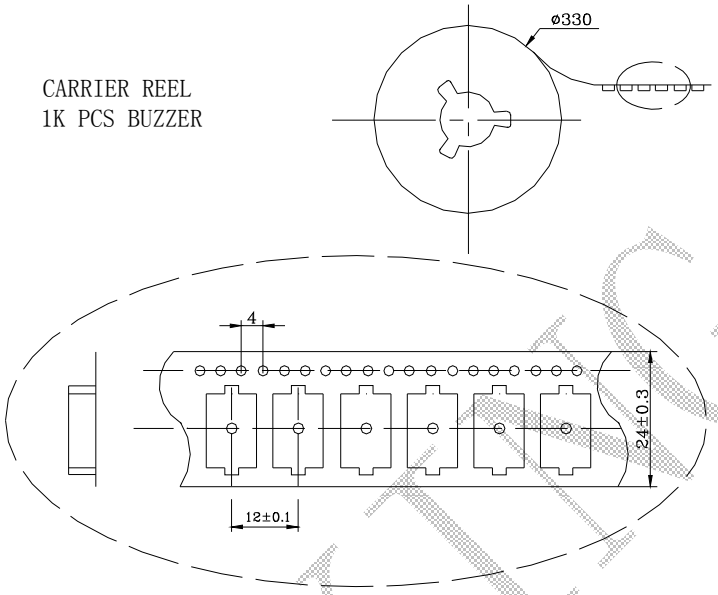
爭議时测试条件 : a)温度：+25±2℃ b)温度：60-70% c)气压：860-1060mbar

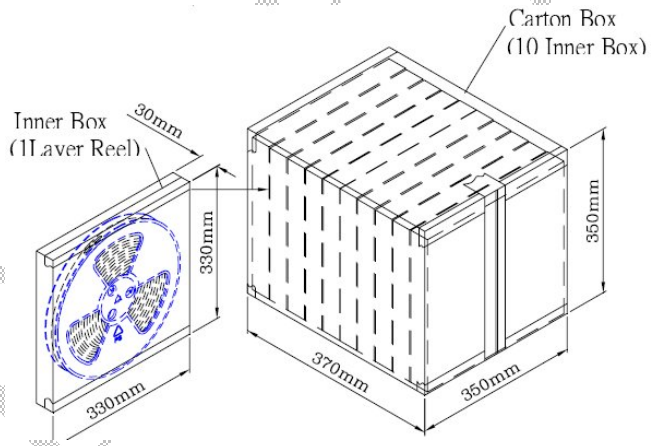
J.Recommended Temperature Profile For Reflow Oven 建議回焊爐溫度曲线

焊接区温度设置在 245 度左右



k.PACKING STANDARD 包装規格





Inner Box	330mmx330mmx30mm	1X2000PCS=2000PCS
Carton Box	370mmx370mmx370mm	10X2000PCS=20000PCS