Product Specification

Number: L-KLS3-PT-12*07-B

Name: Externally driven piezo buzzers

Customer:

Date: 2026-10-14

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Compile	Check	Review	Approval
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Revision Status

Version	Date	Revision Description	Prepared	Checked	Approved

一. SCOPE 适用范围

This specification applies piezoelectric buzzer L-KLS3-PT-12*07-B
此规格书适用于 L-KLS3-PT-12*07-B 无源蜂鸣器

二. SPECIFICATION 规格

TEST CONDITION 测试条件

Standard test condition: temp(+5℃～+35℃)、humidity(45～85%)、Air pressure(860～1060mbar).

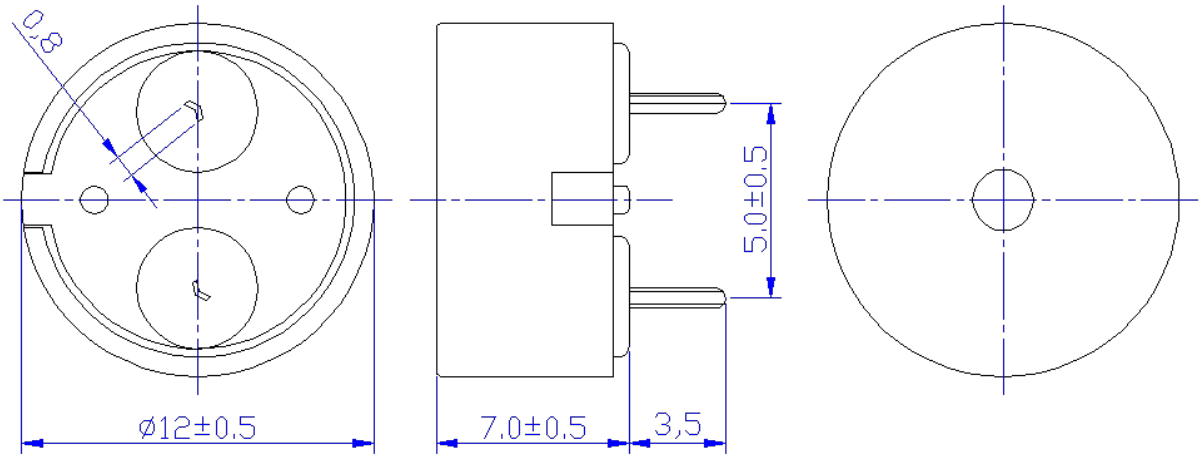
标准测试条件：温度+5℃～+35℃、湿度 45～85%、气压 860～1060mbar。

Basic test condition: temp(25±2℃)、humidity(60～70%)、Air pressure(860～1060mbar).

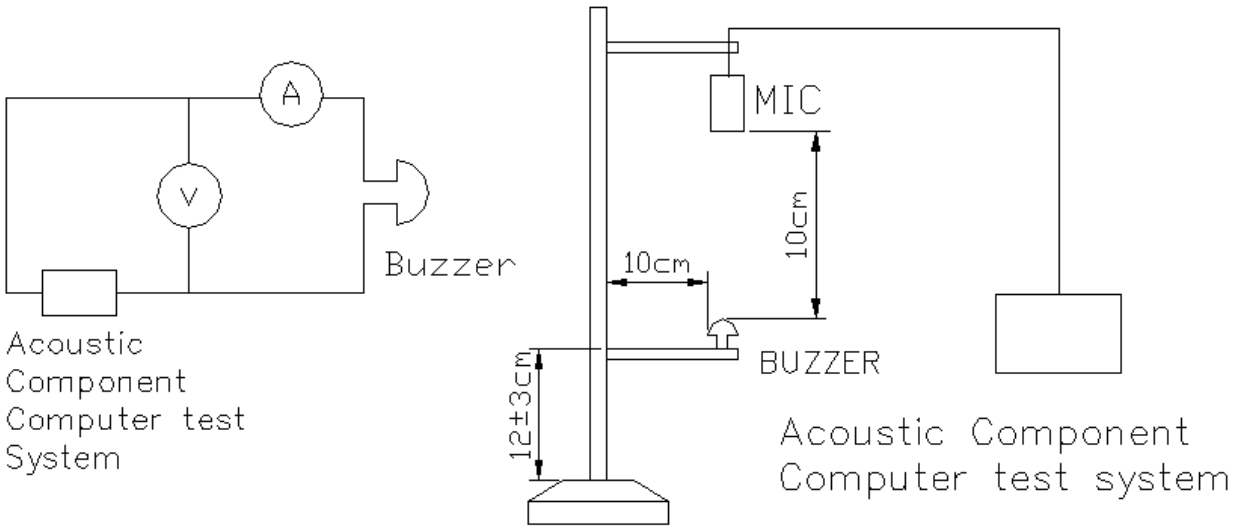
基本测试条件：温度 25±2℃、湿度 60～70%、气压 860～1060mbar。

NO	Parameter	Specification	Unit	Condition
1	Rated Voltage 额定电压	1.5	V	-
2	Max Input Voltage (Vp-p) 最大电压	30	V	-
3	电容量 Capacitance at 120Hz (nF)	10±30%	nF	
4	Resonant Frequency 谐振频率	4000	Hz	Applying rated voltage, standard test Condition 应用于额定电压，标准测试条件
5	Max Rated Current 最大电流	2	mA	
6	Min Sound output(10cm) 最小声压(10cm)	70	dB	Distance at 10cm(A-weight free air).Applying rated voltage, standard test condition 应用于10 厘米距离，额定电压，标准测试条件
7	Response time 响应时间	-	mS	Lowest operating voltage
8	Operating Temperature 操作温度	-40--+85	℃	-
9	Storage Temperature 储存温度	-40--+85	℃	-
11	Dimension 尺寸	12*7.0	mm	请参照外观尺寸图 See attached drawing
12	Material 材质	PBT		-

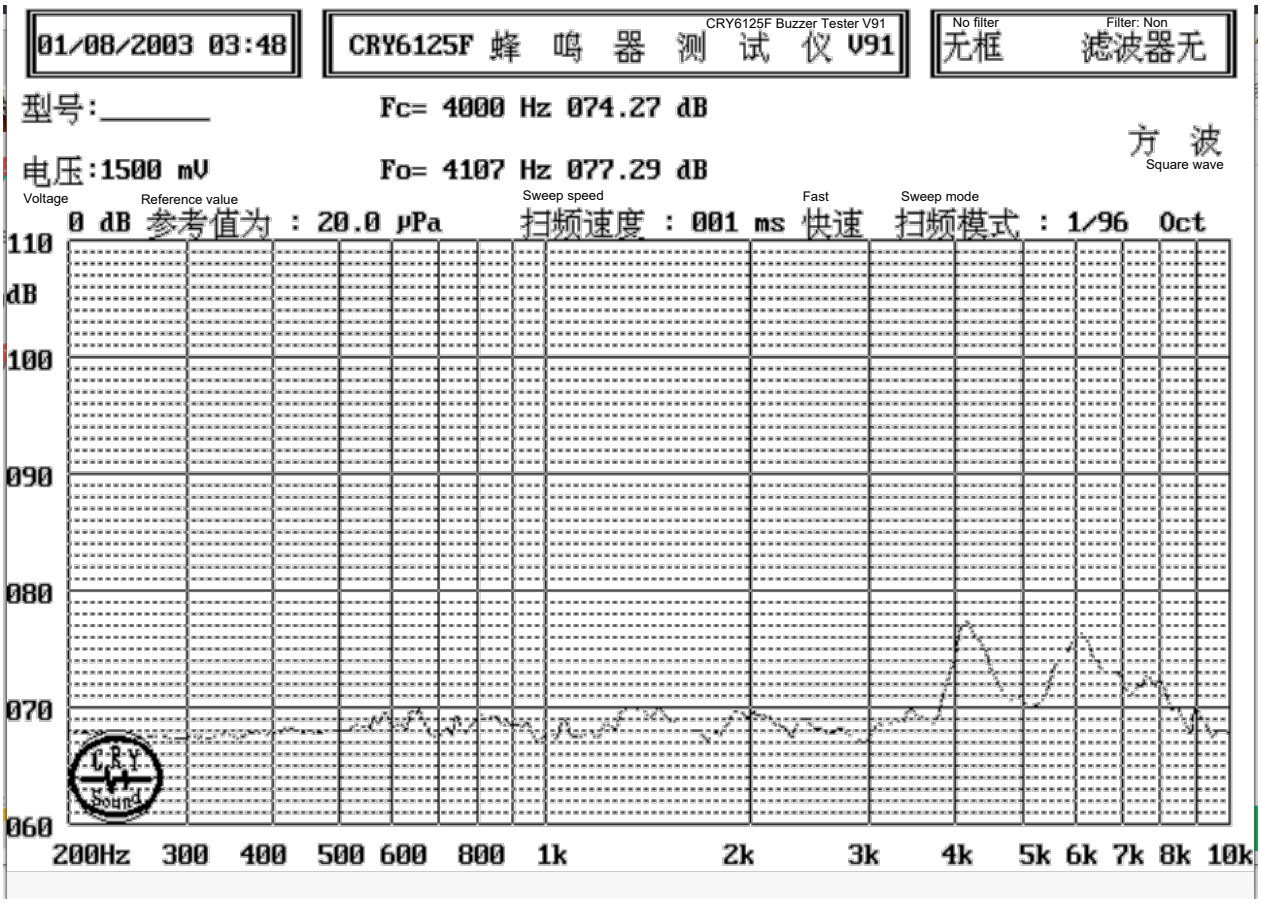
三. DIMENSIONS 尺寸图(Unit: mm; Tolerance: ±0.3mm Except Specified)



四 TESTING METHOD 测量方式



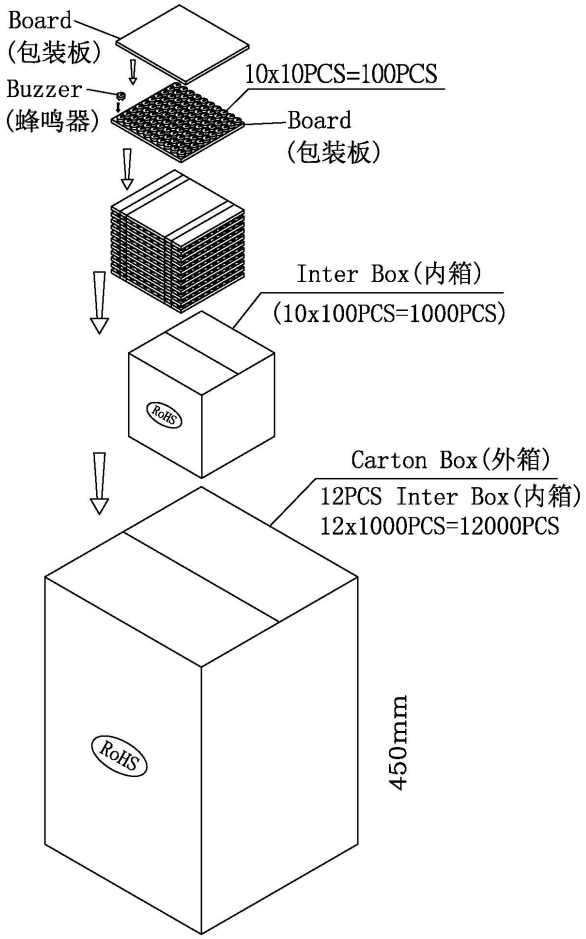
五、频响曲线 FREQUENCY RESPONSE



六 可靠性测试 RELIABLY TEST

NO	项目 ITEM	测试条件 TESTING CONDITION	试验后要求 VARIANCE AFTER TEST
1	湿 热 Humidity	蜂鸣器置于温度在 50±5℃，相对湿度在 93%-3%~93%+2%中，保持 48 小时后，试验后在常温下恢复 2 小时测试 50±5℃, 93(+2/-3)%RH, 48HRS	测试后性能指标应满足承认书要求 All specifications must be satisfied after the test.
2	**高温测试** **High temp.**	蜂鸣器放置在+80±2℃中, 48 小时后测试性能指标 +80±2℃, 48HRS	
3	低温测试 Low temp.	将蜂鸣器放置在-30±2℃中, 48 小时后测试性能指标 -30±2℃, 48HRS	
4	温度循环测试 Temperature Cycling	蜂鸣器在-30℃暴露 30min, 在 80℃暴露 30min，五次循环后，试验后在常温下恢复 2 小时 -30±2℃, 30minutes room temp. 15 minutes +80±2℃, 30 minutes room temp. 15 minutes 5 cycles	
5	跌 落 Drop test	将蜂鸣器放置在水平位置，从 700mm 高度自由跌落到 10mm 硬木版上，跌落 3 次后，检查外观并测量电性能 3 times from height of 70cm onto the surface of 10mm thick wooden board.	
6	振 动 Vibration test	将蜂鸣器置于 10~55Hz、振幅在 1.0mm、X Y Z 轴线方向上振动 0.5 小时 Make the test for the directions of X Y and Z (total 0.5 hours). To-and-fro. sweep time (from 10 to 55 Hz and then from 55 to 10Hz) under single amplitude of 1.0mm is 1 minute.	
7	焊锡耐热性 Solder heat resistance	将产品针脚放置在 250±10℃的锡炉里，持续 10 秒 The part leads (pins) shall be immersed in molten solder maintained at 250±10℃ for a period of 10 seconds.	测试后产品外形尺寸和性能指标应满足承认书要求 After the test part shall meet specifications without any degradation in appearance and performance.

七、产品包装示意图



Board	135x135x6mm	1x100PCS=100PCS
Inter Box	142x142x140mm	10x100PCS=1000PCS

产品使用注意事项：

1. 请勿对蜂鸣器施加超出使用范围以外的电压。
2. 本产品为开放式设计，不符合防水/防胶渗漏要求。
3. 在有腐蚀性气体的地方长时间使用会将蜂鸣器部品腐蚀而不能正常工作。
4. 蜂鸣器的声压性能会随电压或电流大小负荷而改变，应满足电压或电流要求。
5. 避免出音孔前方有障板或被遮蔽会导致工作不稳定。
6. 蜂鸣器应在良好包装下储存，以避免受潮、生锈、针脚端氧化。

Precautions :

1. Do not apply voltage beyond the range of use of the buzzer.
2. This product is of open design and does not meet the requirements of waterproof/glue leakage.
3. Prolonged use in a place with corrosive gas will corrode the buzzer components and prevent them from working properly.
4. The sound pressure performance of the buzzer will change with the voltage or current load, and it should meet the voltage or current requirements.
5. Avoid that there is a baffle in front of the sound hole or it is covered, which will lead to unstable operation.
6. The buzzer should be stored in a good package to avoid moisture, rust and oxidation of the pin end.