

SPECIFICATION FOR APPROVAL

Product	PIEZO BUZZER
Part No.	SEP-8300 (RoHS)
Customer Approval	

Approved By	Checked By	Made By
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A. SCOPE 範疇

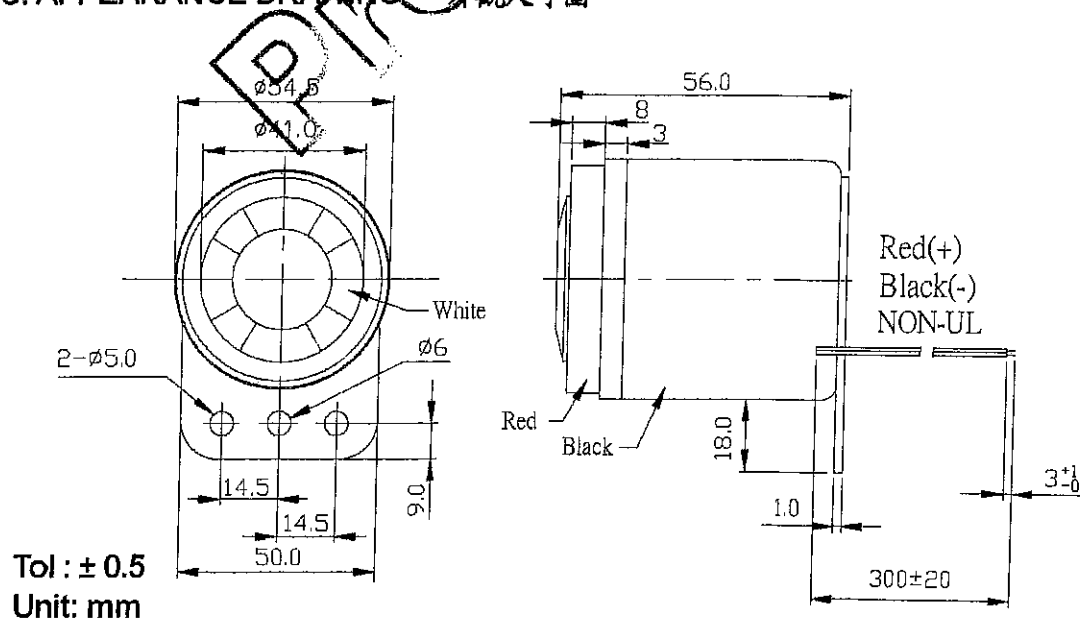
SEP-8300(RoHS)

This specification applies piezo audio siren,
此規格書適用於壓電式蜂鳴器,

B. SPECIFICATION 規格

No.	Item	Unit	Specification	Condition
1	Operating Frequency 操作頻率	KHz	2~4	
2	Operating Volt. range 操作電壓範圍	VDC	6~16	
3	Current consumption 消耗電流	mA	MAX. 260	at 12VDC
4	Sound pressure level 輸出音壓	dB	MIN. 105	at 100 cm/12VDC
5	Rated Voltage 額定電壓	VDC	12	
6	Tone 聲音		Siren 警報音	
7	Operating temp. 操作溫度	°C	-20~+60	
8	Storage temp. 儲存溫度	°C	-30~+70	
9	Dimension 尺寸	mm	$\phi 54.5 \times 156.0$	See appearance drawing 請參照外觀尺寸圖
10	Weight (MAX) 重量	gram	91.6	
11	Material 材質		ABS UL-94 V-0	
12	Terminal 端子		Wtke type	See appearance drawing 請參照外觀尺寸圖
13	Environmental Protection Regulation 環保法規		RoHS	

C. APPEARANCE DRAWINGS 外觀尺寸圖



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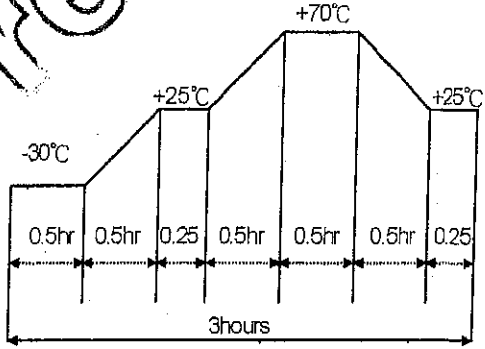
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F. MECHANICAL CHARACTERISTICS 機械特性

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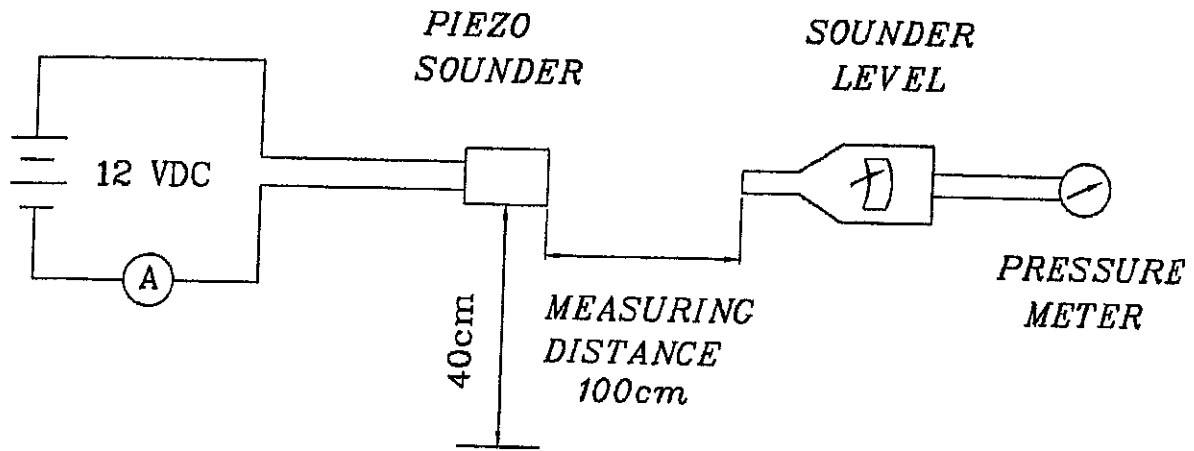
No.	Item	Test Condition	Evaluation standard
1	Solderability 焊錫附着性 (Connector excepted) 端子類不適用此項	Stripped wires of lead wires are immersed in rosin for 5 seconds and then immersed in solder bath of +270±5°C for 3±0.5 seconds. 裸線部份浸入松香溶液 5 秒後,再浸入+270±5°C 熔融焊錫槽 3±0.5 秒	90% min. stripped wires shall be wet with solder. (Except the edge of terminal) 浸入裸線部份附着焊錫 90% 以上。(末端斷面不算)
2	Lead Wire Pull Strength 線材拉力	The pull force shall be applied to double lead wire : Horizontal 3.0N(0.306kg) for 30 seconds. Vertical 2.0N(0.204kg) for 30 seconds. 雙線材水平方向施以 3.0N(0.306kg) 的力量, 垂直方向施以 2.0N(0.204kg) 的力量, 各 30 秒	No interference in operation. 操作上無任何不良。
3	Vibration 振動試驗	Buzzer shall be measured after being applied vibration of amplitude of 1.5mm with 10 to 55hz band of vibration frequency to each of 3 per-pendicular directions for 2 hours. 振動週波數 10~55HZ、全振幅 1.5mm 於 XYZ 3 個方向, 各 2 小時。	The value of oscillation frequency/ current consumption should be in ±10% compared with initial ones. The SPL should be in ±10dB compared with initial one.
4	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, 落於 40mm 厚木板。	諧振頻率與消耗電流變化量須在 ±10% 內。輸出音壓變化量須在 ±10dB 內。

G. ENVIRONMENT TEST 環境測試

No.	Item	Test Condition	Evaluation standard
1	High temp. test 高溫測試	After being placed in a chamber at +70°C for 240 hours 置於+70°C 環境中 240 小時	Being placed for 4 hours at +25°C, buzzer shall be measured. The value of oscillation frequency/ current consumption should be in ±10% compared with initial ones. The SPL should be in ±10dB compared with initial one. 經測試後, 靜置於+25°C (室溫) 環境中 4 小時後, 諧振頻率與消耗電流變化量須在 ±10% 內。輸出音壓變化量須在 ±10dB 內。
2	Low temp. test 低溫測試	After being placed in a chamber with -30°C for 240 hours 置於-30°C 環境中 240 小時	
3	Humidity test 相對濕度測試	After being placed in a chamber at +40°C and 90±5% relative humidity for 240 hours 置於+40°C, 相對濕度 90±5% 環境中 240 小時	
4	Temp. cycle test 溫度循環試驗	The part shall be subjected to 5 cycles. One cycle shall be consist of: 單體承受溫度循環測試 5 次, 其循環內容如圖示: 	

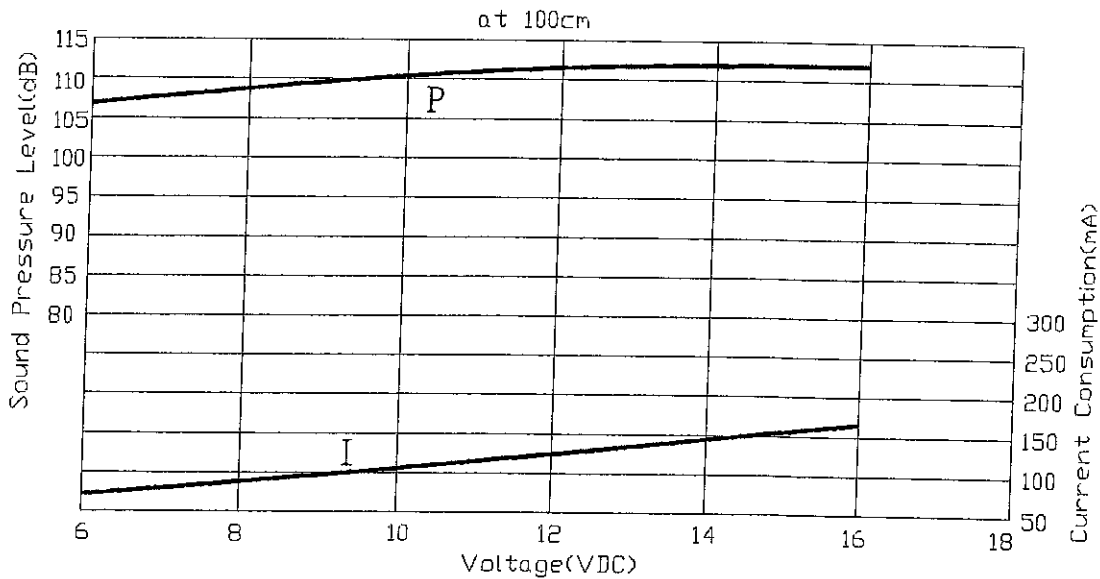


1. S.P.L. Measuring Circuit 音壓測試接線圖



Mic: RION S.P.L. meter UC30 or equivalent
 Mic: RION 噪音計 UC30 或同等品

E. VOLTAGE:SOUND PRESSURE LEVEL / VOLTAGE:CURRENT CONSUMPTION CHARACTERISTICS 電壓與音壓/電壓與耗電流之特性

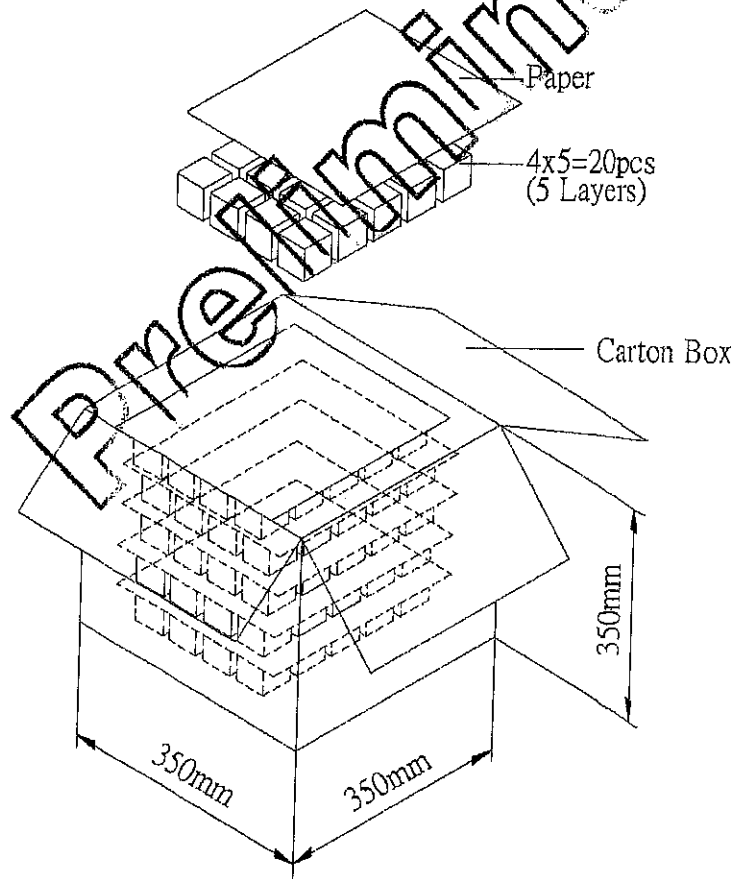


No.	Item	Test condition	Evaluation standard
1	Operating life test 壽命測試	1. Continuous life test 高溫壽命測試(連續) 10 minutes continuous operation at +45°C with rated voltage applied. 在+45°C環境下,以額定電壓連續操作10分鐘。 2. Intermittent life test 室溫壽命測試(間歇) A duty cycle of 1 minute on, 0.5 minutes off, a minimum of 960 times at room temp. (+25±2°C) and rated voltage applied. 在室溫下(+25±2°C),以額定電壓操作,通電1分鐘/斷電0.5分鐘測試960次循環。	Being placed for 4 hours at +25°C, buzzer shall be measured. The value of oscillation frequency/ current consumption should be in ±10% compared with initial ones. The SPL should be in ±10dB compared with initial one. 經測試後,靜置於+25°C(室溫)環境中4小時後,諧振頻率與消耗電流變化量須在±10%內。輸出音壓變化量須在±10dB內。

TEST CONDITION.

Standard Test Condition 一般測試條件	:	a) Temperature : +5 ~ +35°C	b) Humidity : 45-85%	c) Pressure : 860-1060mbar
Judgment Test Condition 爭議時測試條件	:	a) 溫度 : +5 ~ +35°C	b) 濕度 : 45-85%	c) 氣壓 : 860-1060mbar
	:	a) Temperature : +25 ± 2°C	b) Humidity : 60-70%	c) Pressure : 860-1060mbar
	:	a) 溫度 : +25 ± 2°C	b) 濕度 : 60-70%	c) 氣壓 : 860-1060mbar

I. PACKING STANDARD 包裝規格



Carton Box	350mmx350mmx350mm	20PCSx5 Layers=100PCS
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