

SPECIFICATION FOR APPROVAL

承 认 书

Description : **Magnetic Transducer**

Vender's Part No. : **SMT-1290A-05027**

Customer's. Part No. :

Serial No. : **SAN-2098**

Version No. : **1.1**

CUSTOMER'S APPROVED SIGNATURE		

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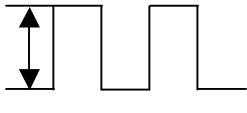
Approved By	Checked By	Made By
		James Li 2016-5-21

A:SCOPE 範疇

This specification applies magnetic buzzer,SMT-1290A-05027
(此規格書適用於電磁式蜂鳴器，SMT-1290A-05027)

B:SPECIFICATION 規格

Test condition:TEMP=+25±2 °C Related humidity=65±5% Air pressure:860-1060mbar

NO.	Item	Unit	Specification	Condition
1	Rated Voltage 額定電壓	Vo-p	5.0	
2	Operating Volt 操作電壓	Vo-p	4.0-6.0	
3	Mean Current 平均耗電流	mA	Max.40	Applying rated voltage 2400HZ square wave 1/2 duty 施以額定電壓，2400HZ 方波，50%負載
4	Coil Resistance 直流阻抗	Ω	47±7	
5	Sound Output 輸出音壓	dBA	85/10cm	Distance at 10cm(A-weight free air), Applying rated voltage 2400HZ,square wave,1/2duty 在自由音場 10 公分處，施以額定電壓，2400HZ 方波，50%負載
6	Rated Frequency 額定頻率	Hz	2400	
7	Operating Temp 操作溫度	°C	-40-+70	
8	Storage Temp 儲存溫度	°C	-40-+85	
9	Dimension 尺寸	mm	φ 12.0×H9.0	See attached drawing. 請參照外觀尺寸圖
10	Weight 重量	gram	2.0	
11	Material 材質		PPS(Black)	
12	Coil 線圈		Alloy 合金	High temperature resistant and ultra high tension line 耐高溫超高張力線
13	Terminal 端子		SMD type (鍍化金/Plating Au)	See attached drawing 請參照外觀尺寸圖
14	Storage life 保存期限	month	6	6 months preservation at room temp(25±3°C),Humidity40% 在室溫下 25±3°C 濕度 40% 以下可保存 6 個月
15	Environmental Protection Regulation 環保法則		RoHS	產品 PAD 焊點加高溫含鉛錫，防止回流焊普通環保錫融化短路（普通錫熔點 217 度）（歐盟豁免 2011/65/EU 附件 III）

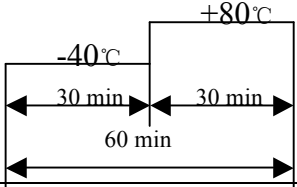
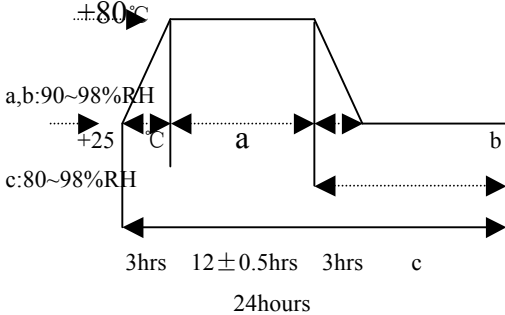


EU RoHS 2 Annex III Exemption list

7(a)

Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead).

C: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 +80°C for 96 hours.置於+80°C環境中 96 小時	After the test the part shall meet specifications without any degradation in appearance and performance except SPL. after 4 hours at +25°C, The SPL shall be in ±10dBA compared with initial one. 經測試後，靜置於+25°C（室溫）環境中 4 小時後，單體除音壓外，外觀及電氣特性須符合規格，輸出音壓變化量在±10dBA 以內。
2	Low temp.test 低溫測試	After being placed in a chamber at -40°C for 96 hours.置於-40°C環境中 96 小時	
3	Thermal shock 熱衝擊試驗	The part shall be subjected to 10 cycles. One cycle shall consist of; 對單體施以熱衝擊試驗 10 次迴圈，其迴圈內容如圖示： 	
4	Temp./Humidity Cycle 溫度/濕度迴圈測試	The part shall be subjected to 10 cycle shall be 24 hours and consist of; 單體承受溫度/濕度迴圈測試 10 次，其迴圈內容如圖示： 	

D: RELIABILITY TEST 信賴性測試

No.	Item	Test condition	Evaluation standard
1	Operating life test 壽命試驗	<p>1. Continuous life test 高溫壽命測試（连续） The part shall be subjected to 72 hours at +55°C with 5.0V,2400Hz applied 在+55°C環境下，輸入 5.0V,2400HZ 連續操作 72 小時。</p> <p>2. Intermittent life test 室温寿命测试（间歇） A duty cycle of 1 minute on, 1 minutes off, a minimum of 10000 times at room temp .(+25±10°C) with 5.0V,2400Hz applied. 在室温下（+25±10°C），輸入 5.0V，2400Hz 通电 1 分钟、断电 1 分钟，测试 10000 次循环。</p>	<p>After the test the part shall meet specifications without any degradation in appearance and performance except SPL. after 4 hours at +25°C, the SPL should be in ±10dBA compared with initial one. 經測試後，靜置於+25°C（室溫）環境中 4 小時後，單體除音壓外，外觀及電氣特性須符合規格，輸出音壓變化量須 ±10dBA 內。</p>

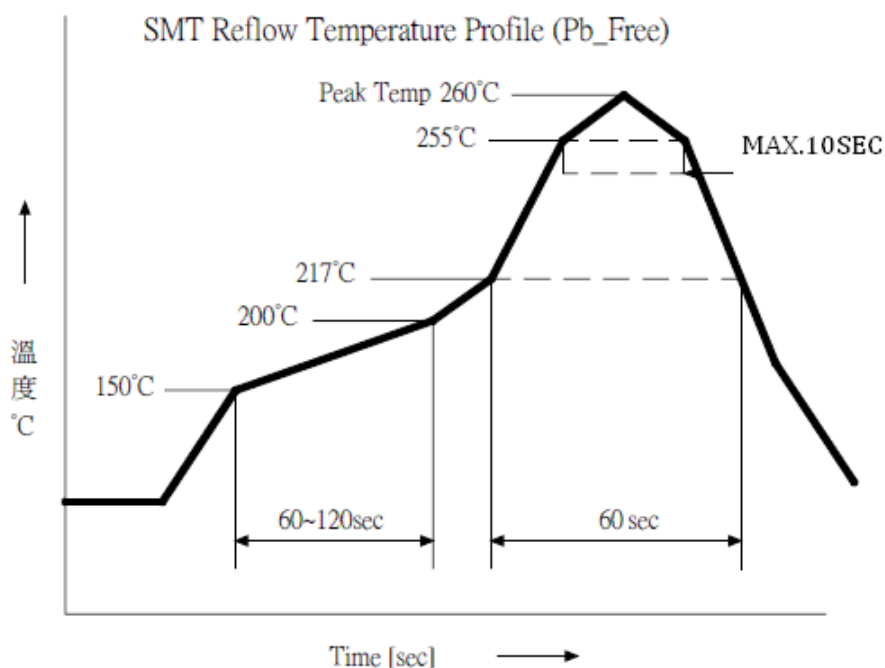
TEST CONDITION.

Standard Test Condition : a)Temperature: +5~+35°C b)Humidity:45~85% c)Pressure: 860~1060mbar
一般測試條件 : a)溫度 : +5~+35°C b)濕度 :45~85% c)氣壓 : 860~1060mbar

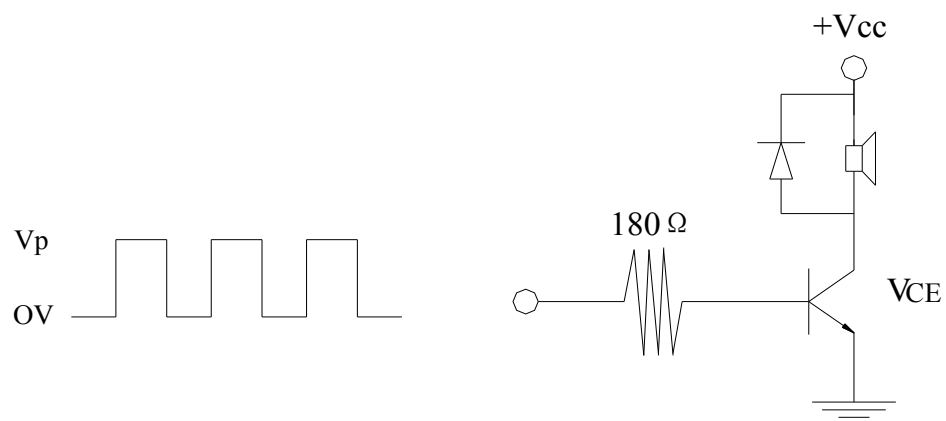
Judgment Test Condition: a)Temperature:+25±2°C b)Humidity:60~70% c)Pressure: 860~1060mbar
標準測試條件 :a)溫度 :+25±2°C b)濕度 :60~70% c)氣壓 : 860~1060mbar

No	Item	Test condition	Evaluation standard
1	Solder ability 焊錫附著性	Lead terminal are immersed in rosin for 5seconds and then immersed in Solder bath of +260±5°C for 3±0.5 second 端子部分浸入松香溶液 5 秒後,再浸入+260±5°C 熔融焊槽中 3±0.5 秒.	95% surface of lead pads must be covered with fresh solder 錫膏須覆蓋端子上方 95%
2	Soldering Heat Resistance 焊錫耐熱性	The product followed the reflow temperature curve to test its reflow thermo stability 產品依照回焊溫度曲線測試回焊耐熱性	No interference in operation 操作上無任何不良
3	Terminal Mechanical Strength 端子強度	Apply the terminal with 1KG strength for 1 minute 對端子施以 1 公斤拉力 1 分鐘	No damage and cutting off 端子不鬆動,不脫落
4	Vibration 振動測試	The part shall be subjected to a vibration cycle of 10Hz to 55Hz to 10Hz in a period of 1 minute. Total peak amplitude shall be 1.52mm(9.3G).The vibration test shall consist of 2 hours per axis in each three axes(X,Y,Z),Total 6 hours. 振幅 1.52 mm,頻率 10Hz-55Hz-10Hz,時間 1 分鐘,X,Y,Z 3 個方向各 2 小時,共 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. 經測試後,單體除音壓外,外觀及電氣特性須符合規格,輸出音壓變化量須±10dBA 內.
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,落於 40mm 厚木板上.	

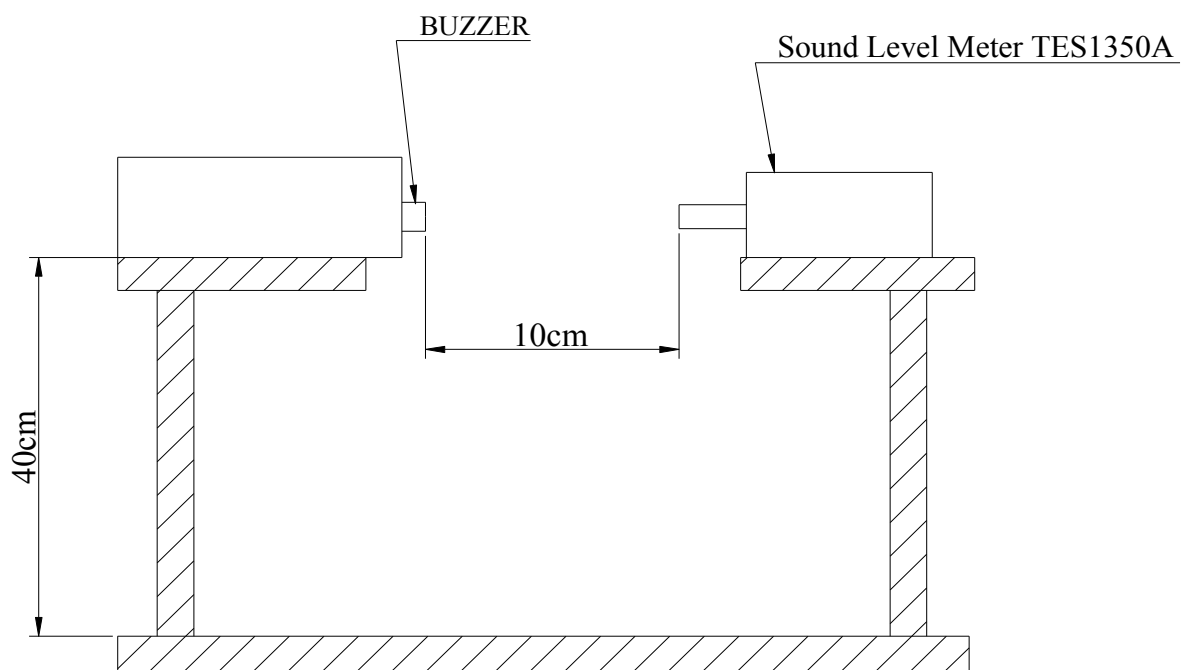
Recommended Temperature Profile For Reflow Oven 建議迴焊爐溫度曲線



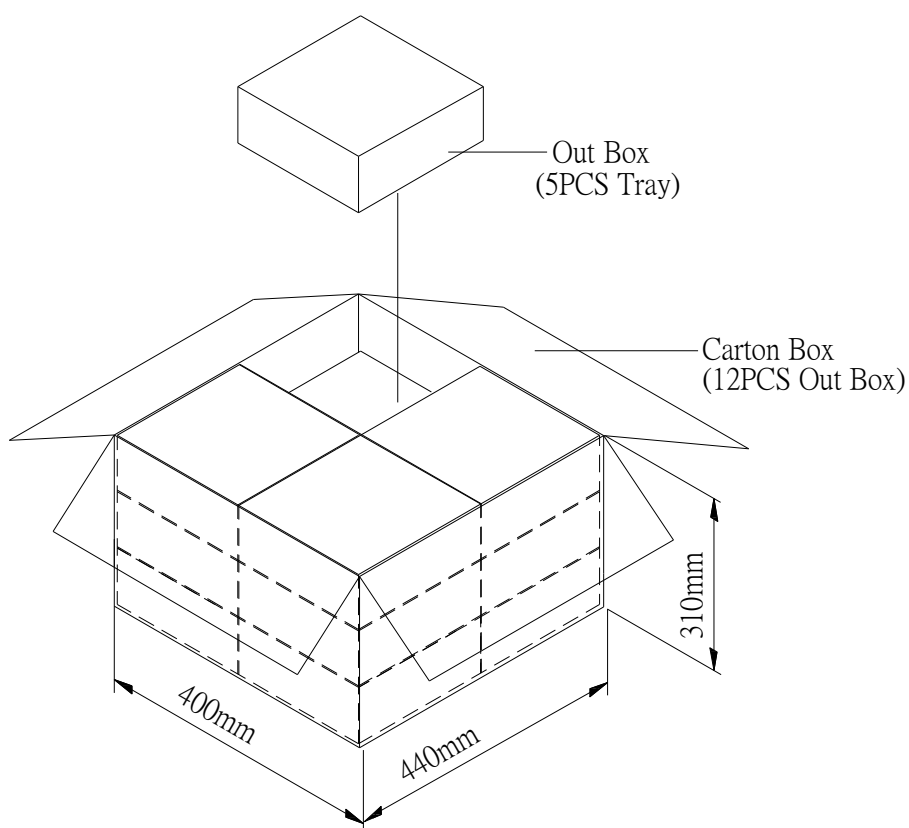
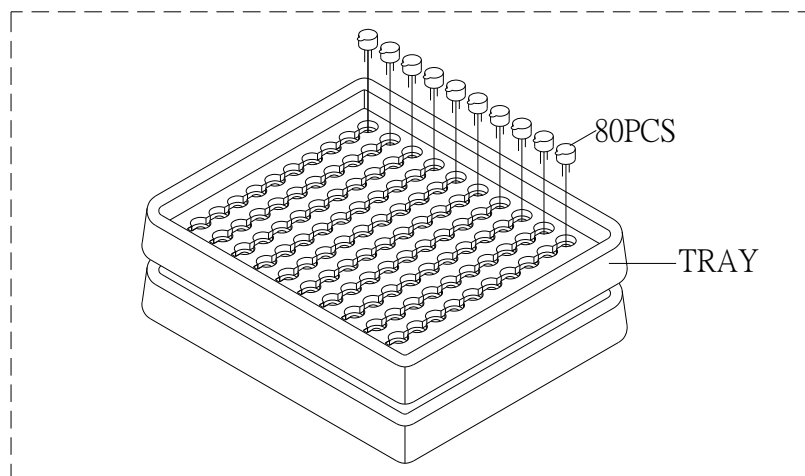
F: MEASUREMENT METHOD 测试方式:



G: INSPECTION FIXTURE 测试架

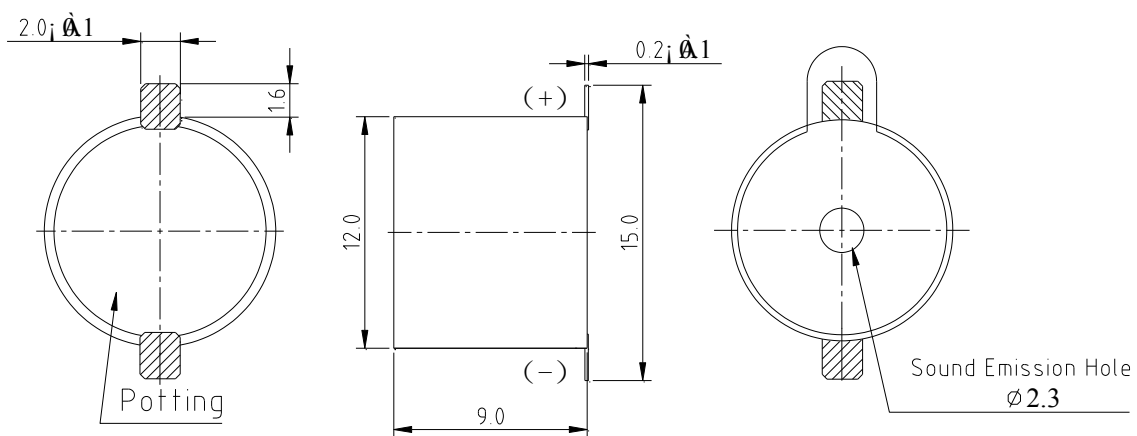


H:PACKING包装规格:



包装箱	长×宽×高(mm)	包装数量(只)
吸塑盒	184×184×23	80
小纸箱	200×190×100	400
大纸箱	440×400×310	4800

I: DIMENSIONS(外观尺寸图)

Tolerance: ± 0.5 Unit:mm