

SPECIFICATION FOR APPROVAL

承 認 書

Description : Magnetic Buzzer

Kingstate Part No. : KCVG084B16

Customer's Model No. : _____

Specification No. : TKS-1544

Number Of The Edition : 2.3

CUSTOMER'S APPROVED SIGNATURE

--	--	--

志豐電子股份有限公司 KINGSTATE ELECTRONICS CORP.



Address: 10F, No. 69-11, Sec. 2, Chung Cheng E. Rd., Tamshui County, Taipei Hsien, Taiwan, R.O.C.

International sales dept.: TEL : 886-2-2809-5651 FAX:886-2-2809-7151

Domestic sales dept.: TEL : 886-2-2809-0668 FAX:886-2-28096748

[http : //www.kingstate.com.tw](http://www.kingstate.com.tw)

Approved by	Checked by	Issued by
陳其 5/20/06'	陳其 5/19/06'	Fei 5/19/06'



A. SCOPE 範疇

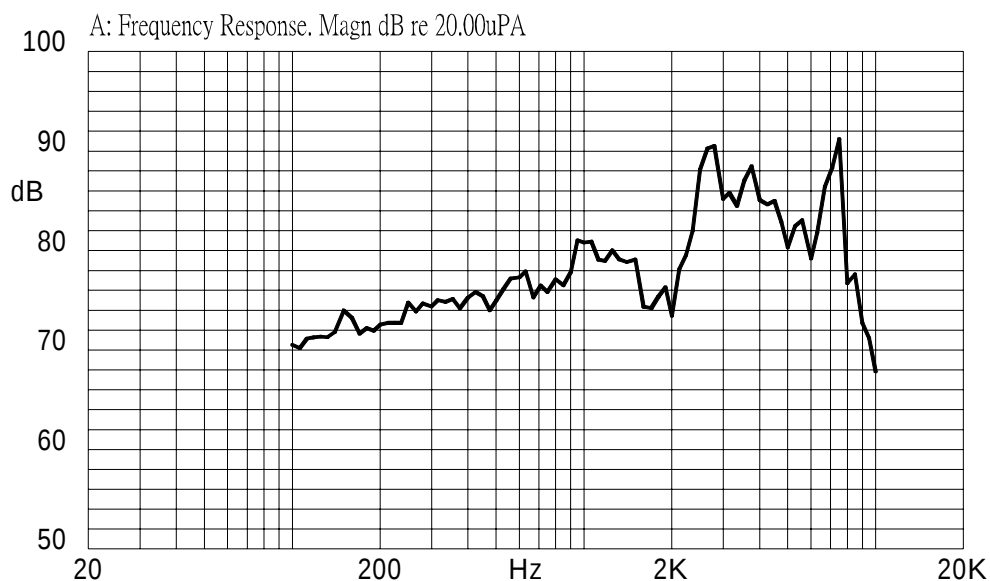
This specification applies magnetic buzzer, **KCVG084B16**

此規格書適用於電磁式蜂鳴器, **KCVG084B16**

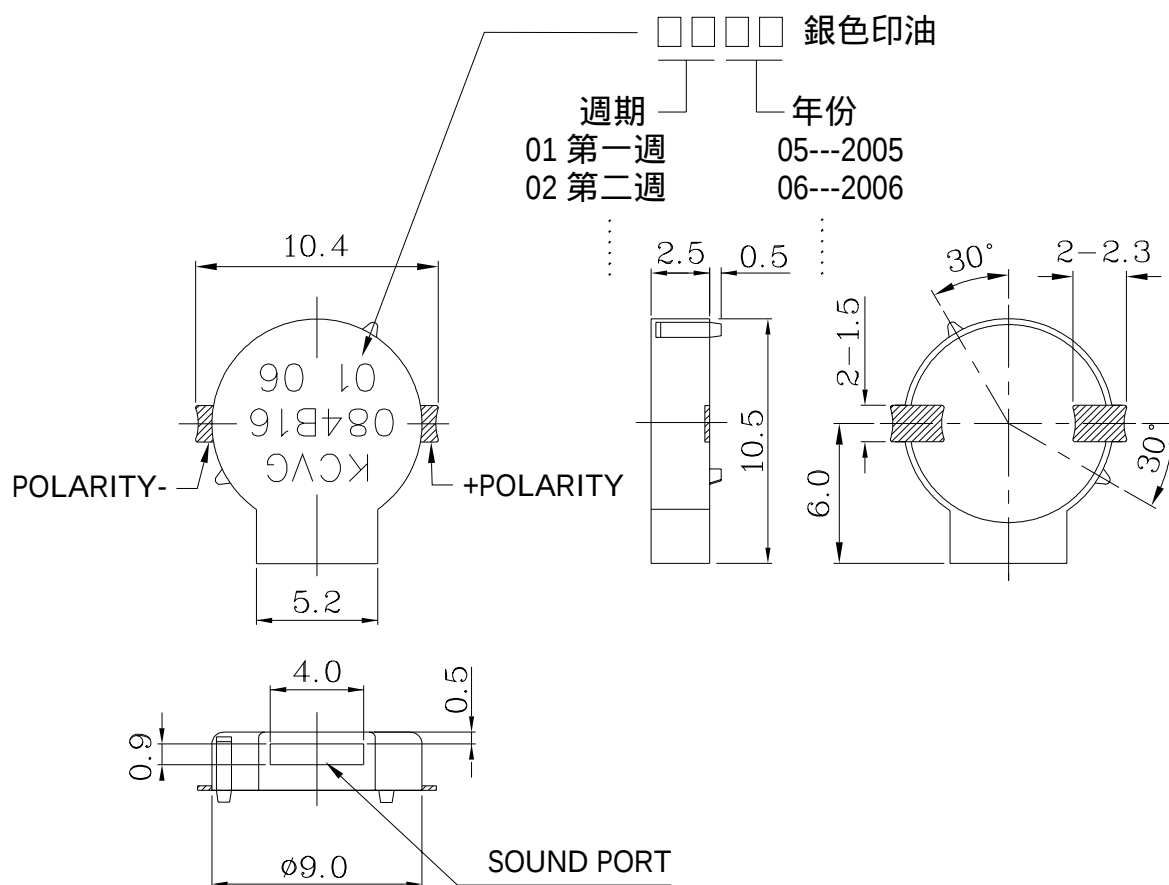
B. SPECIFICATION 規格

No.	Item	Unit	Specification	Condition
1	Rated Voltage 額定電壓	Vo-p	3.6	
2	Operating Volt. 操作電壓	Vo-p	2.5~4.5	
3	Mean Current 平均耗電流	mA	Max. 110	Applying rated voltage, 2730Hz square wave, 1/2 duty 施以額定電壓, 2730Hz, 方波, 50%負載
4	Coil Resistance 直流阻抗	Ω	16.0 ± 2.4	
5	Sound Output 輸出音壓	dBA	Min. 85 (Typical 90)	Distance at 10cm (A-weight free air). Applying rated voltage 2730Hz, square wave, 1/2 duty 在自由音場 10 公分處, 施以額定電壓 2730Hz, 方波 50%負載.
6	Rated Frequency 額定頻率	Hz	2730	
7	Operating Temp. 操作溫度		-30 ~ +70	
8	Storage Temp. 儲存溫度		-40 ~ +85	
9	Dimension 尺寸	mm	$\phi 9.0 \times H2.4$	See attached drawing. 請參照外觀尺寸圖
10	Weight 重量	gram	0.60	
11	Material 材質		PPS (Black)	
12	Terminal 端子		SMD type (鍍化金/Plating Au)	See attached drawing. 請參照外觀尺寸圖
13	Environmental Protection Regulation 環保法規		RoHS	

C. TYPICAL FREQUENCY RESPONSE CURVE 頻率響應曲線



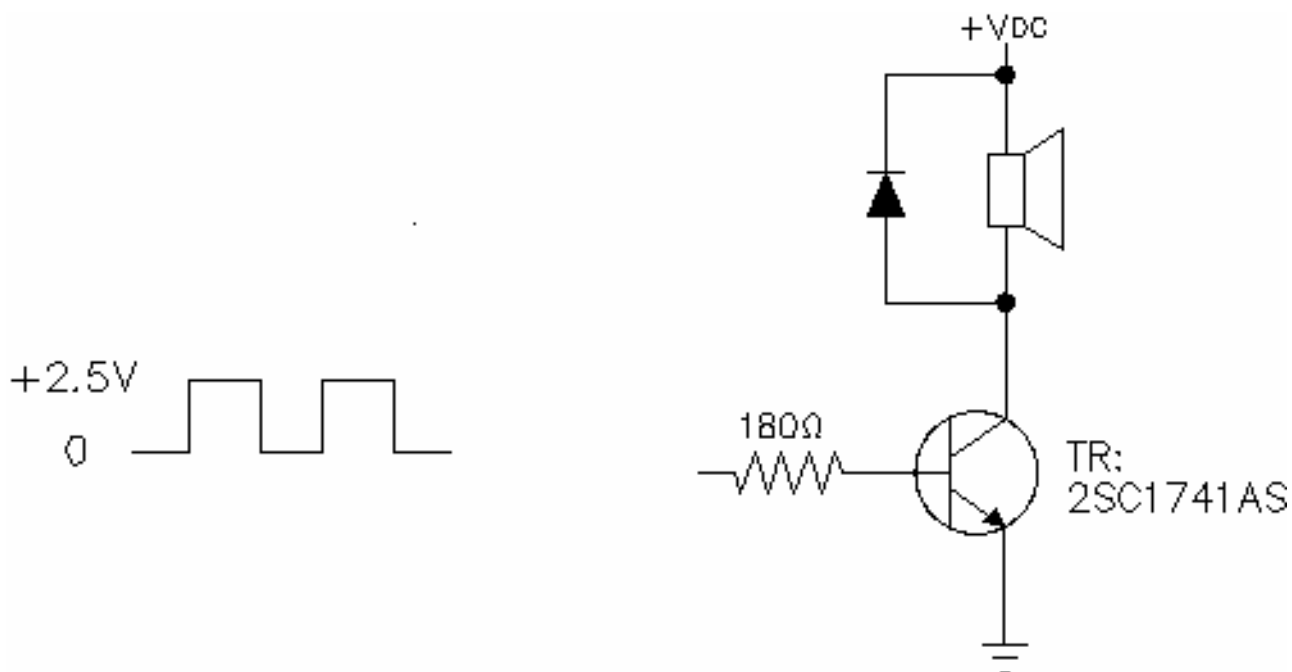
D. APPEARANCE DRAWING 外觀尺寸圖



Tol : ± 0.3

Unit: mm

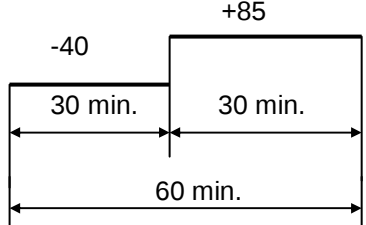
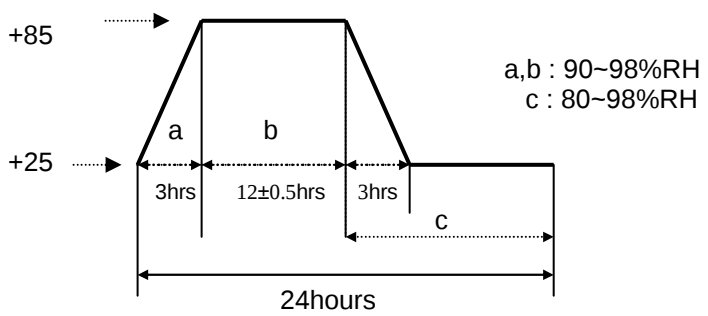
E. MEASUREMENT METHOD 測量方式



F. MECHANICAL CHARACTERISTICS 機械特性

No.	Item	Test condition	Evaluation standard
1	Terminal Mechanical Strength 端子強度	2 lead pads shall be soldered on the pc board, and the force (10n) shall be applied behind the part for 10±1 seconds. 將 2 個端子焊在 PC 板上後,對單體施以 10n 拉力 10±1 秒	No damage and cutting off 端子不鬆動, 不脫落
2	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 1.52mm, 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 performance except SPL. SPL shall be 77dBA or more.
3	Dorp 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.	經測試後,單體除音壓外,外觀及電氣特性須符合規格. 輸出音壓為 77dBA 以上.

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 +85 for 96 hours. 置於+85 環境中 96 小時	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 shall be 77dBA or more. 經測試後, 靜置於+25 (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. 輸出音壓為 77dBA 以上.
2	Low temp. test 低溫測試	After being placed in a chamber at -40 for 96 hours. 置於-40 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 次循環,其循環內容如圖示 	
4	Temp./ Humidity Cycle 溫度/溼度循環測試	The part shall be subjected to 10 cycles. One cycle shall be 24 hours and consist of; 單體承受溫度/溼度循環測試 10 次. 其循環內容如圖示 	

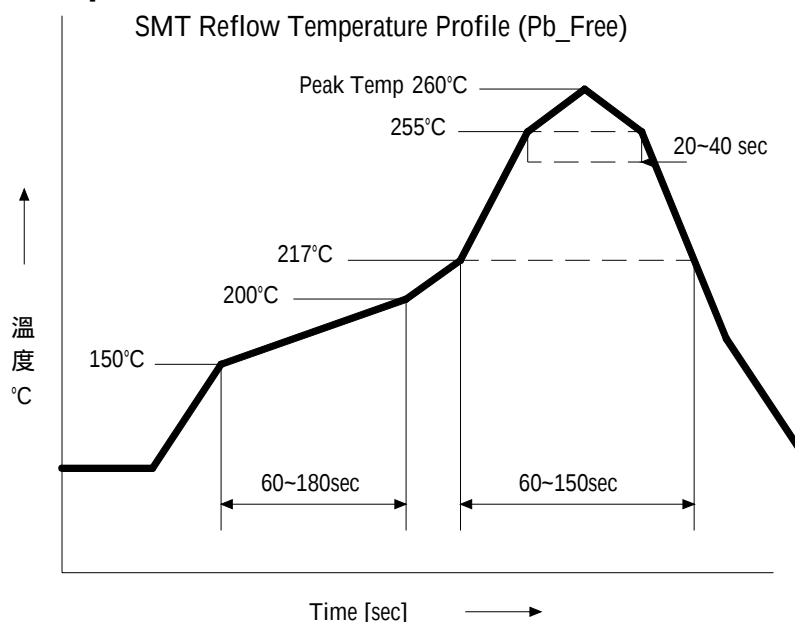
H. RELIABILITY TEST 信賴性測試

No.	Item	Test condition	Evaluation standard
1	Operating life test 壽命測試	1. Ordinary temperature 室溫壽命測試 The part shall be subjected to 1000 hours at room temperature (+25±10) with 3.6V, 2730Hz applied. 在室溫(+25±10)下，輸入 3.6V，2730Hz 連續操作 1000 小時 2. High temperature 高溫壽命測試 The part shall be subjected to 500 hours at +70 with 3.6V, 2730Hz applied. 在+70 環境下，輸入 3.6V，2730Hz 連續操作 500 小時 3. Low temperature 低溫壽命測試 The part shall be subjected to 500 hours at -30 with 3.6V, 2730Hz applied. 在-30 環境下，輸入 3.6V，2730Hz 連續操作 500 小時	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 shall be 77dBA or more. 經測試後，靜置於+25（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。輸出音壓為 77dBA 以上。

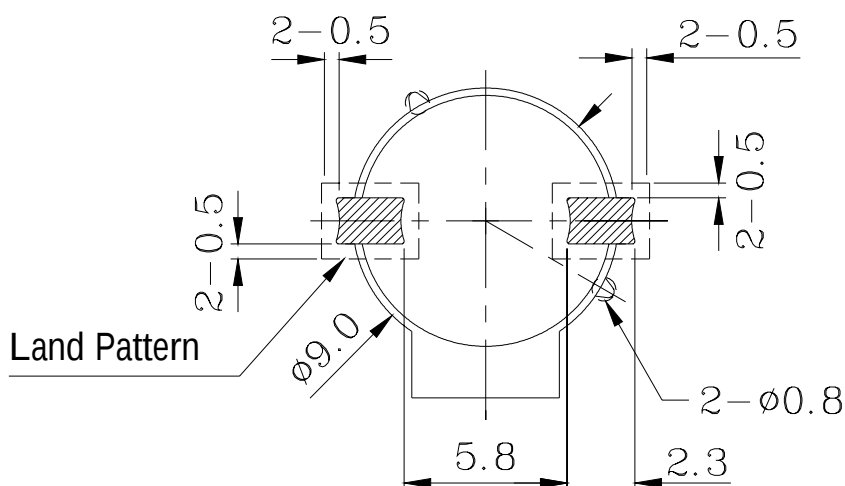
TEST CONDITION.

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

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



J. Recommended land pattern 建議基板設計尺寸圖



K. PACKING STANDARD 包裝規格

