

# SPECIFICATION FOR APPROVAL

## 承 認 書

Description : **Magnetic Buzzer**

Kingstate Part No. : **KXG1205**

Customer's Model No. :

Specification No. : **TKS-7094**

Number Of The Edition : **1.2**

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>


Approved by	Checked by	Issued by
陳公華 3/10/06'	陳公華 3/1/06	Shen 3/06/06'

## A. SCOPE 範疇

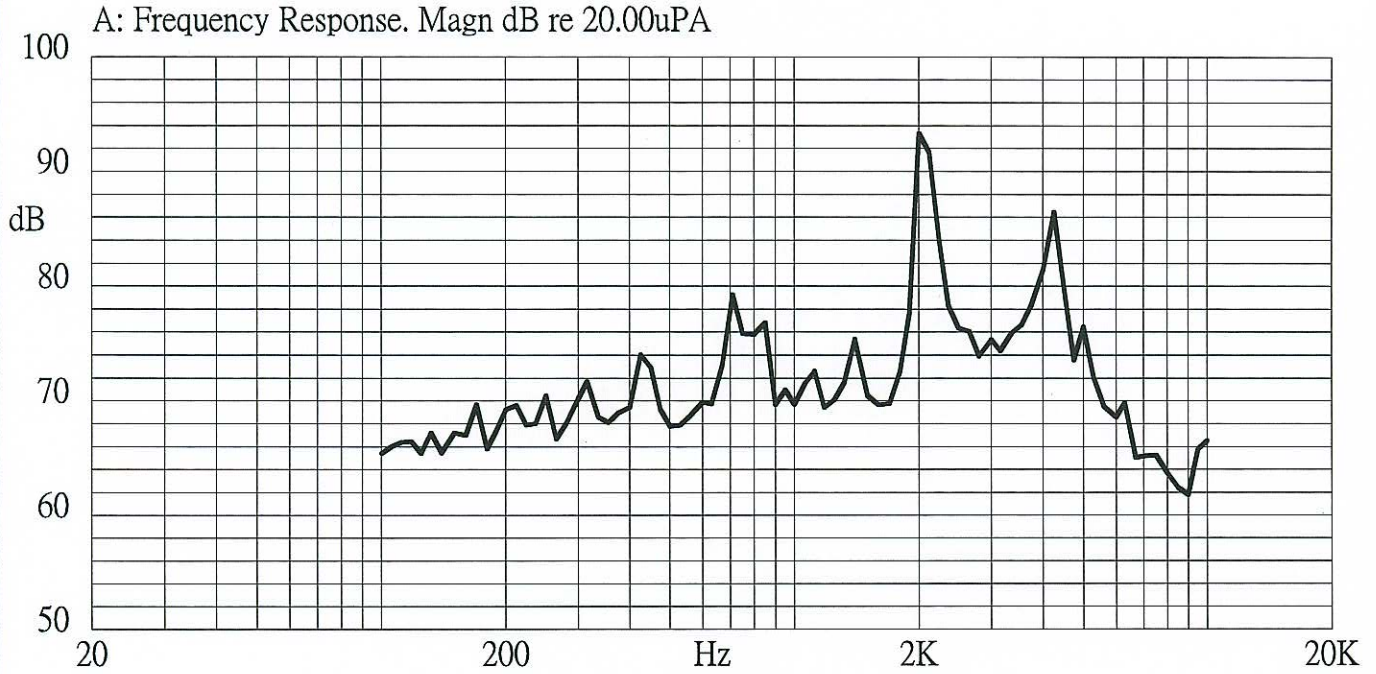
This specification applies magnetic buzzer, **KXG1205**

此規格書適用於電磁式蜂鳴器, **KXG1205**

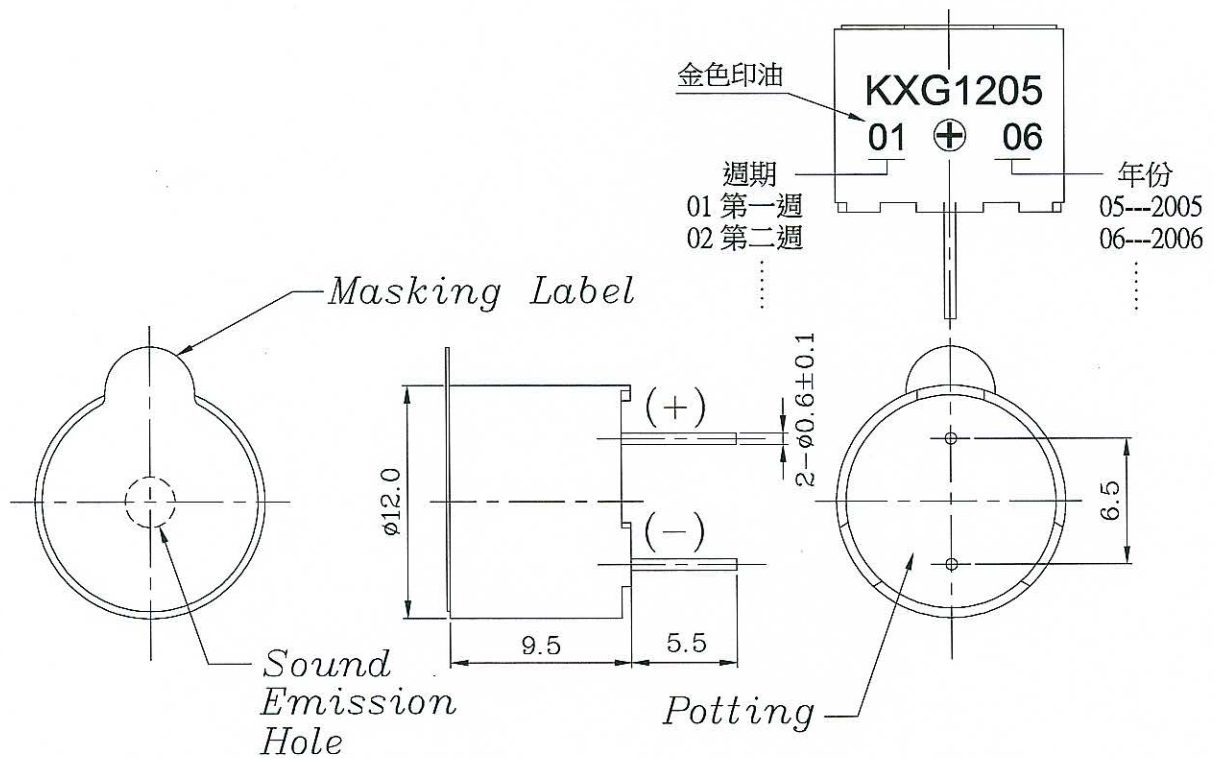
## B. SPECIFICATION 規格

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	3.0~8.0	
3	Mean Current 平均耗電流	mA	Max.45	Applying rated voltage,2400Hz square wave, 1/2duty 施以額定電壓,2400Hz,方波,50%負載
4	Coil Resistance 直流阻抗	$\Omega$	$47.0 \pm 7.0$	
5	Sound Output 輸出音壓	dBA	Min.85 (Typical 92)	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	$^{\circ}\text{C}$	-30 ~ +70	
8	Storage Temp. 儲存溫度	$^{\circ}\text{C}$	-40 ~ +85	
9	Dimension 尺寸	mm	$\phi 12.0 \times H9.5$	See attached drawing. 請參照外觀尺寸圖
10	Weight 重量	gram	1.60	
11	Material 材質		PBT (Black)	
12	Terminal 端子		Pin 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**

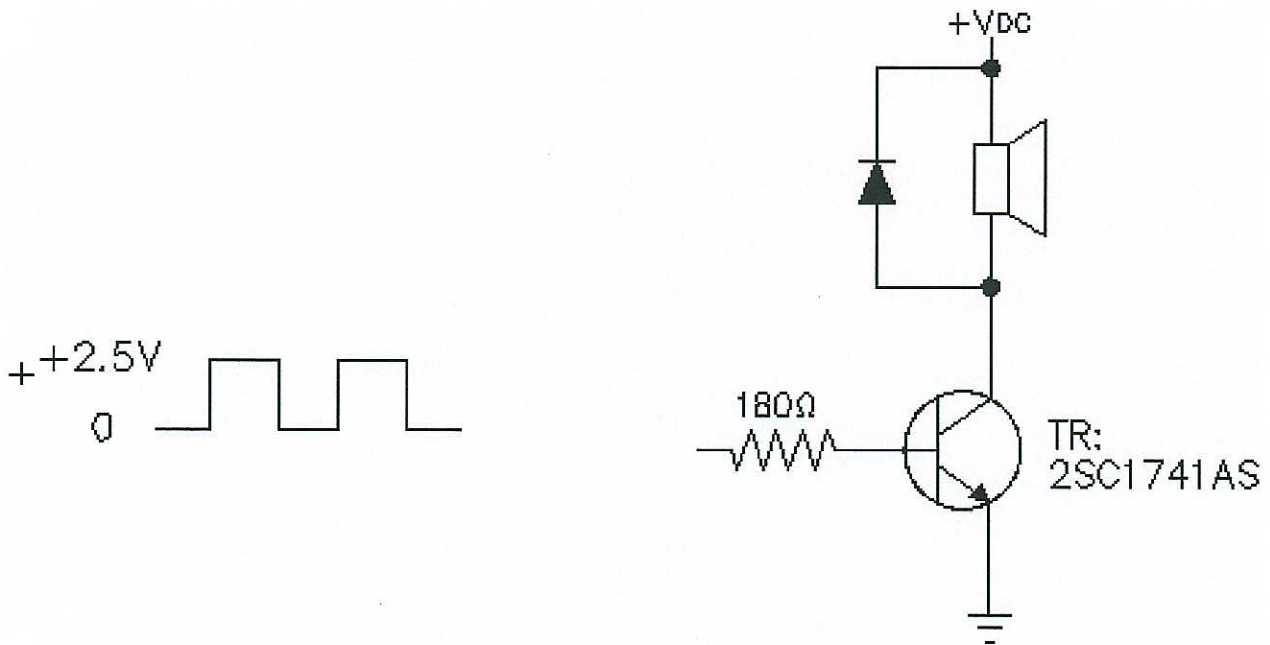


**D. APPEARANCE DRAWING 外觀尺寸圖**



**Tol: ± 0.5**  
**Unit: mm**

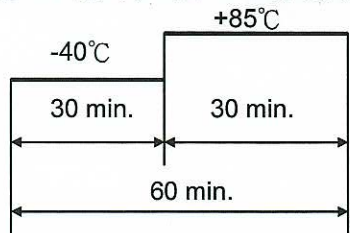
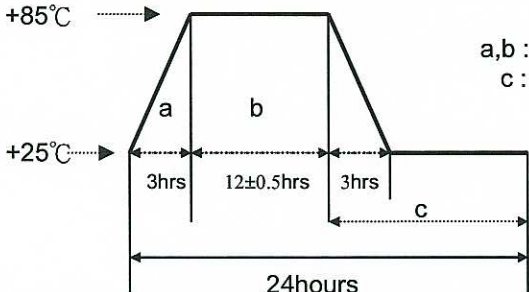
## E. MEASUREMENT METHOD 測量方式



## F. MECHANICAL CHARACTERISTICS 機械特性

No.	Item	Test condition	Evaluation standard
1	Solderability 焊錫附着性	Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of +270±5°C for 3±1 seconds. 端子部份浸入松香溶液 5 秒後,再浸入+270±5°C 熔融焊錫槽中 3±1 秒.	90% min. lead terminals shall be wet with solder. (Except the edge of terminal) 浸入端子部份附着焊錫 90%以上.(末端斷面不算)
2	Soldering Heat Resistance 焊錫耐熱性	Lead terminal are immersed up to 1.5mm from sounder's body in solder bath of +260±5°C for 3±1 seconds. 距離端子根部 1.5mm 的位置,浸入+260±5°C 的焊錫槽 3±1 秒.	No interference in operation 操作無任何不良
3	Terminal Mechanical Strength 端子強度	The force 10 seconds of 9.8N(1.0kg) is applied to each terminal in axial direction. 各端子的軸方向施以 9.8N(1.0kg)的力量 10 秒.	No damage and cutting off 端子不鬆動, 不脫落
4	Vibration 振動測試	Buzzer shall be measured after being applied vibration of amplitude of 1.5mm with 10 to 55hz band of vibration frequency to each of 3 per-pendicular directions for 2 hours. 振動週波數 10~55HZ、全振幅 1.5mm 於 X.Y.Z 3 個方向,各 2 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.
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.	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.

## 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°C for 96 hours. 置於+85°C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°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。輸出音壓變化量須在±10dBA 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  a,b : 90~98%RH c : 80~98%RH	

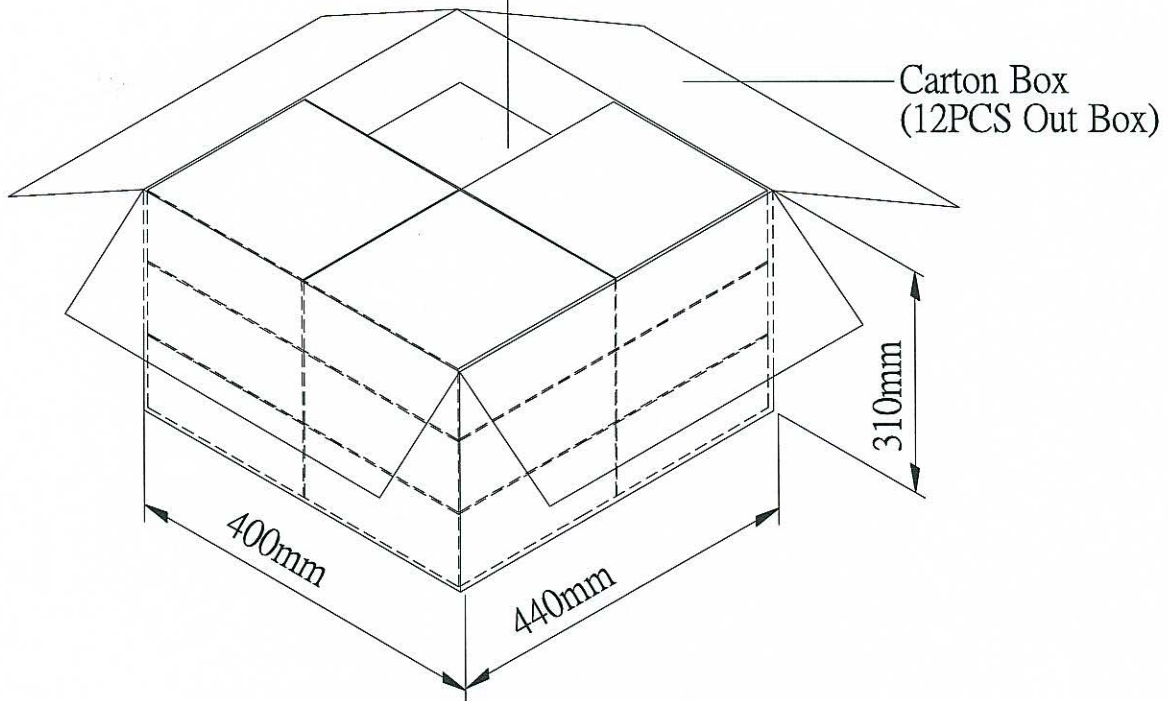
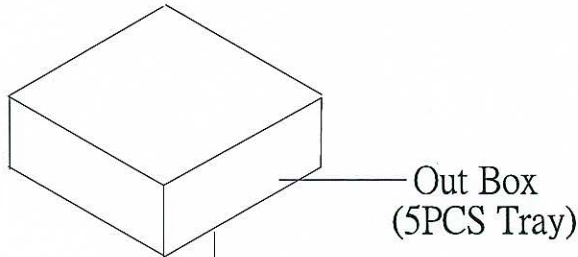
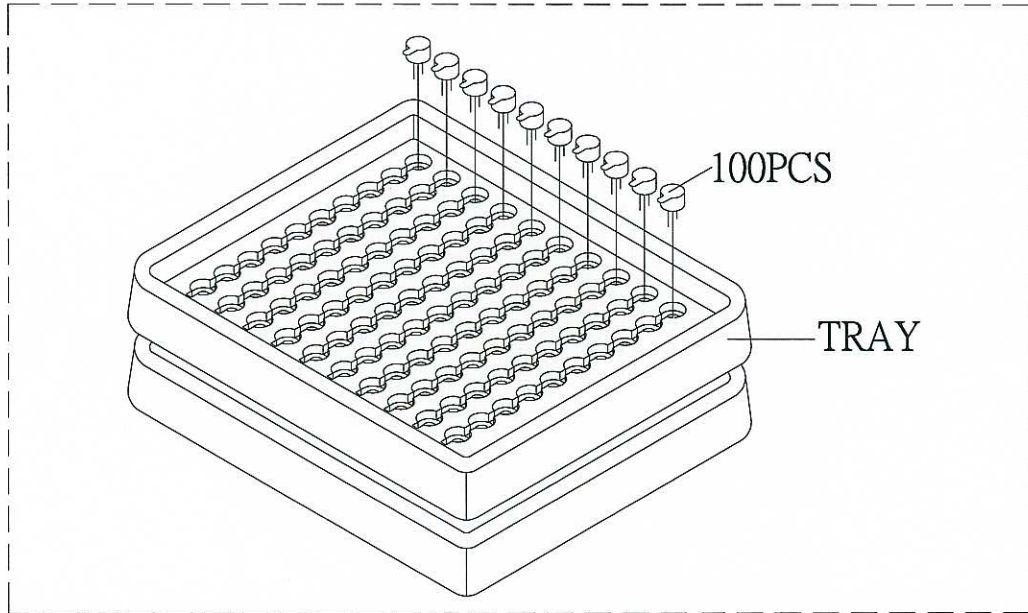
## H. RELIABILITY TEST 信賴性測試

No.	Item	Test condition	Evaluation standard
1	Operating life test 壽命測試	<p>1.Continuous life test 高溫壽命測試(連續) 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 室溫壽命測試(間歇) 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. 在室溫下(+25±10°C)，輸入 5.0V,2400Hz 通電 1 分鐘/斷電 1 分鐘,測試 10000 次循環。</p>	After the test the part shall meet specifications with-out 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。輸出音壓變化量須在±10dBA 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
Judgement Test Condition 爭議時測試條件	:	a) Temperature : +25 ± 2°C	b) Humidity : 60-70%	c) Pressure : 860-1060mbar

**I. PACKING STANDARD 包裝規格**



Tray	184mmx184mmx23mm	1x100PCS=100PCS
Out Box	200mmx190mmx100mm	5LAYERx100PCS=500PCS
Carton Box	440mmx400mmx310mm	500PCSx12=6,000PCS