SPECIFICATION FOR APPROVAL

承

認

書

| Description | • | Magnetic Buzzer |
|-----------------------|----------|-----------------|
| Kingstate Part No. | W e1 . | KSTG951RP/A |
| Customer's Model No. | : | |
| Specification No. | Я1 pi | TKS-1567 |
| Number Of The Edition | | 1.4 |

| 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 |
|---------------|--------------|-----------------|
| 13 An 2/4/06' | Th. 2-12/06' | Fei 2/11/06' |

A. SCOPE 範疇

This specification applies magnetic buzzer, **KSTG951RP/A** 此規格書適用於電磁式蜂鳴器, **KSTG951RP/A**

B. SPECIFICATION 規格

| No. | Item | Unit | Specification | Condition | |
|-----|--|------|------------------------------|--|--|
| 1 | Rated Voltage 額定電壓 | Vo-p | 5.0 | Vo-p | |
| 2 | Operating Volt. 操作電壓 | Vo-p | 4.0~6.0 | OV | |
| 3 | Mean Current 平均耗電流 | mA | Max. 80 | Applying rated voltage,2730Hz square wave, 1/2duty 施以額定電壓 2730Hz,方波 50%負載 | |
| 4 | Coil Resistance 直流阻抗 | | 30.0 ± 4.5 | | |
| 5 | Sound Output 輸出音壓 | dBA | Min.85 (Typical 92) | Distance at 10cm(A-weight free air). Applying rated voltage 2730Hz,square wave, 1/2duty 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. 操作温度 | | -20 ~ +60 | | |
| 8 | Storage Temp. 儲存溫度 | | -30 ~ +70 | | |
| 9 | Dimension 尺寸 | mm | 9.0 × H4.5 | See attached drawing. 請參照外觀尺寸圖 | |
| 10 | Weight 重量 | gram | 0.60 | | |
| 11 | Material 材質 | | PPO | | |
| 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 | | |

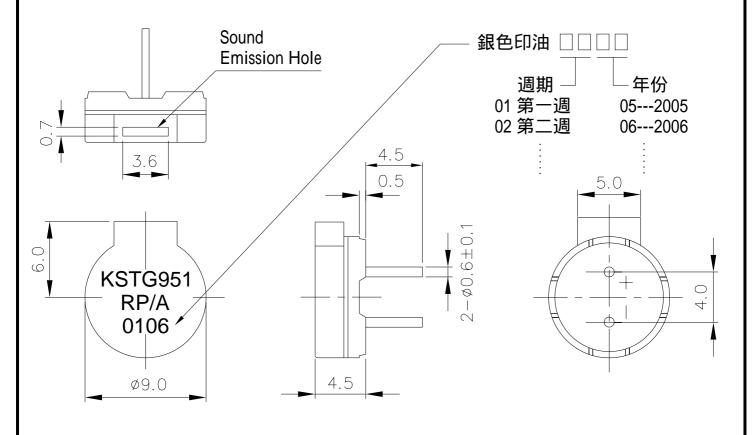
C. TYPICAL FREQUENCY RESPONSE CURVE 頻率響應曲線 A: Frequency Response, Magn dB re 20.00uPA 90 dB 80 70

2K

20K

D. APPEARANCE DRAWING 外觀尺寸圖

200

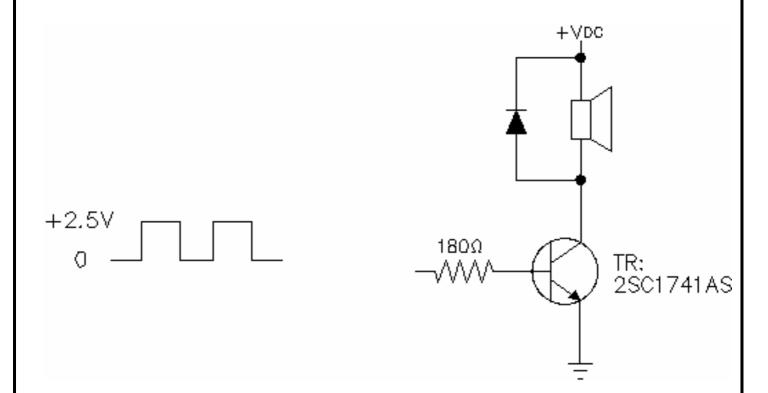


Tol: ± 0.5 Unit: mm

50

20

E. MEASUREMENT METHOD 测量方式



F. MECHANICAL CHARACTERISTICS 機械特性

| No. | Item | Test condition | Evaluation standard | |
|-----|--|--|---|--|
| 1 | Solderability 焊錫附著性 | Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of +270±5 for 3±1 seconds. 端子部份浸入松香溶液 5 秒後,再浸入+270±5 溶融焊鍚槽中3±1 秒. | 90% min. lead terminals shall be wet with solder. (Except the edge of terminal) 浸入端子部份附著焊錫 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 for 3±1 seconds. 距離端子根部 1.5mm 的位置,浸入+260±5 的焊錫槽 3±1 秒. | No interference in operation 操作上無任何不良 | |
| 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. 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. | | |

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 for 96 hours. 置於+70 環境中 96 小時 | |
| 2 | Low temp. test 低溫測試 | After being placed in a chamber at -30 for 96 hours. 置於-30 環境中 96 小時 | |
| 3 | Thermal Shock 熱衝擊試驗 | -30 30 min. 30 min. | 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 should be in ±10dBA compared with |
| 4 | Temp./ Humidity Cycle 溫度/溼度循環測試 | 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 +70 a,b:90~98%RH c:80~98%RH | initial one. 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. 輸出音壓變 化量須在±10dBA 內. |

H. RELIABILITY TEST 信賴性測試

| 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) The part shall be subjected to 72 hours at +45 with 5.0V, 2730Hz applied. 在+45 環境下,輸入 5.0V, 2730Hz 連續操作 72 小時. 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) with 5.0V, 2730Hz applied. 在室溫下(+25±10), 輸入 5.0V, 2730Hz 通電 1 分鐘/斷電 1 分鐘,測試 10000 次循環. | 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 should be in ±10dBA compared with initial one. 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.輸出音壓變化量須在±10dBA內. |

TEST CONDITION.

 Standard Test Condition 一般測試條件
 : a) Temperature: +5 ~ +35 b) Humidity: 45-85% c) Pressure: 860-1060mbar b) 濕度: 45-85% c) 氣壓: 860-1060mbar c) 氣壓: 860-1060mbar b) Humidity: 60-70% c) Pressure: 860-1060mbar b) Humidity: 60-70% c) 氣壓: 860-1060mbar c) 氣壓: 860-1060mbar c) 氣壓: 860-1060mbar c) 氣壓: 860-1060mbar

I. PACKING STANDARD 包裝規格 100PCS TRAY Out Box (7PCS Tray) Carton Box (12PCS Out Box) 310mm 400mm 440mm

| Tray | 184mmx184mmx23mm | 1x100PCS=100PCS |
|------------|-------------------|----------------------|
| Out Box | 200mmx190mmx100mm | 7LAYERx100PCS=700PCS |
| Carton Box | 440mmx400mmx310mm | 700PCSx12=8,400PCS |

志豐電子股份有限公司 KINGSTATE ELECTRONICS CORP 6/6 KSTG951RP/A