



请承认书

Version No.: V2.0

常州昊翔电子有限公司
Changzhou HaoXiang Electronic Co., LTD

客户名称

CUSTOMER NAME: _____

产品名称

COMMODITY : SMD MAGNETIC BUZZER

产品型号

MODEL NO : TDA-M50020-0340

客户料号

PART NO : _____

| | | | |
|----|----|----|-------------------|
| 审核 | 秦皓 | 主办 | 唐俐雅 Jul. 11, 2018 |
|----|----|----|-------------------|

| | | | |
|-------|--|----|--|
| 客户承认栏 | | | |
| 承认 | | 拒收 | |
| | | | |

常州昊翔电子有限公司

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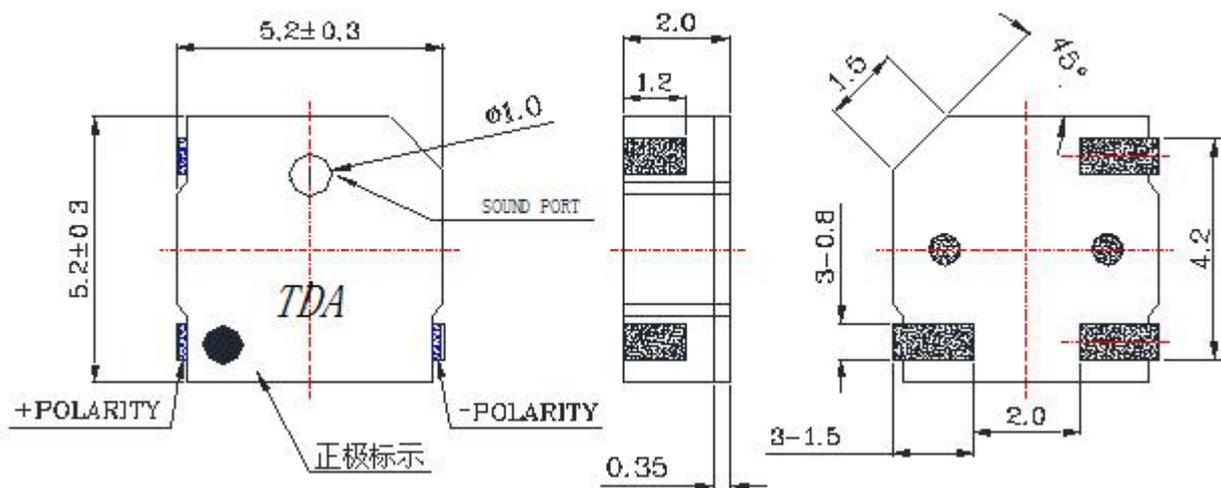
A. SCOPE

This specification applies magnetic buzzer, **TDA-M50020-0340**

B. SPECIFICATION

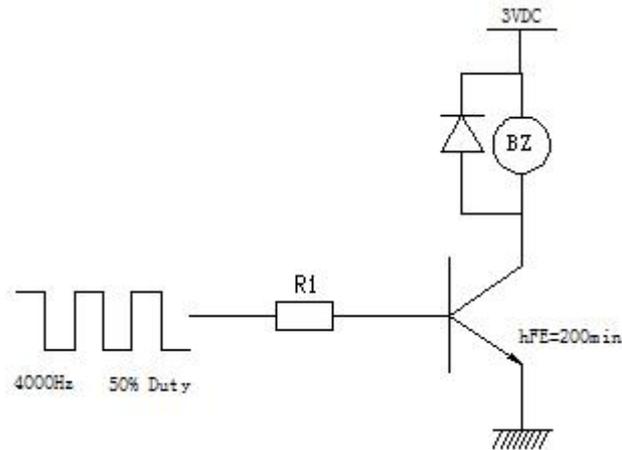
| No. | Item | Unit | Specification | Condition |
|-----|-------------------------------------|--------------------|----------------------|---------------------------------|
| 1 | Oscillation Frequency | Hz | 4000 | square wave |
| 2 | Operating Voltage | Vo-p | 2~4 | |
| 3 | Rated Voltage | Vo-p | 3.0 | |
| 4 | Current Consumption | mA | MAX.100 | at Rated Voltage |
| 5 | Sound Pressure Level | dB | MIN. 75 | at 10cm, Rated Voltage, 1/2duty |
| 6 | Coil Resistance | Ω | 12 \pm 3 | |
| 7 | Operating Temperature | $^{\circ}\text{C}$ | -20 ~ +70 | |
| 8 | Storage Temperature | $^{\circ}\text{C}$ | -30 ~ +80 | |
| 9 | Dimension | mm | 5.2x 5.2 x H2.0 | See appearance drawing |
| 10 | Weight (MAX) | gram | 0.1 | |
| 11 | Housing Material | | LCP(Black) | |
| 12 | Leading Pin | | Tin Plated Brass(Sn) | See appearance drawing |
| 13 | Environmental Protection Regulation | | RoHS | |

C. APPEARANCE DRAWING

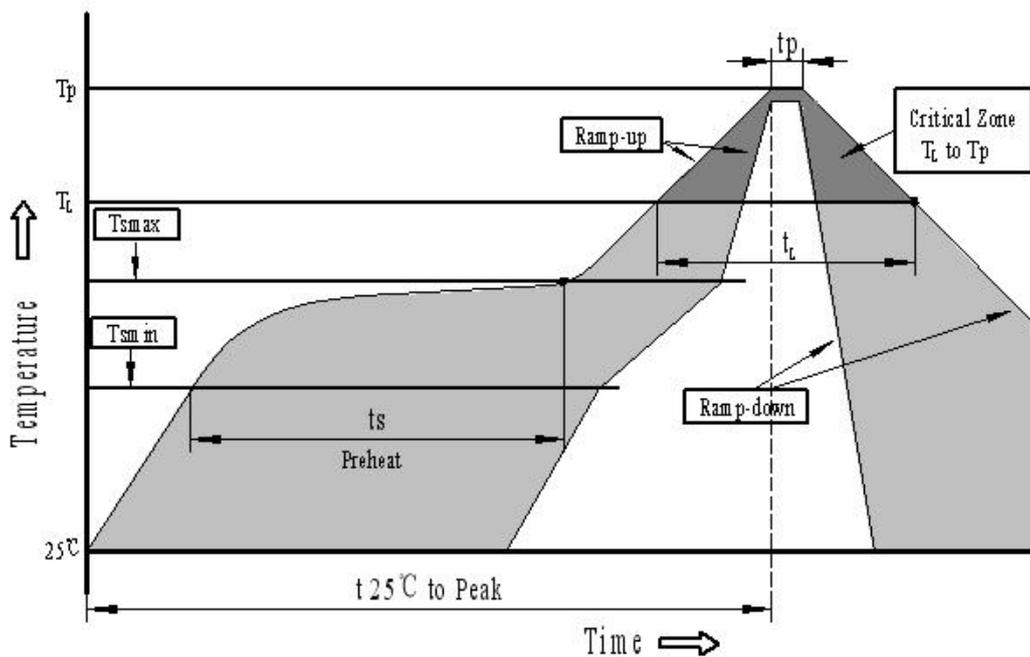


Unit:mm Tolerance : ± 0.5 mm

D. RECOMMEND DRIVING CIRCUIT

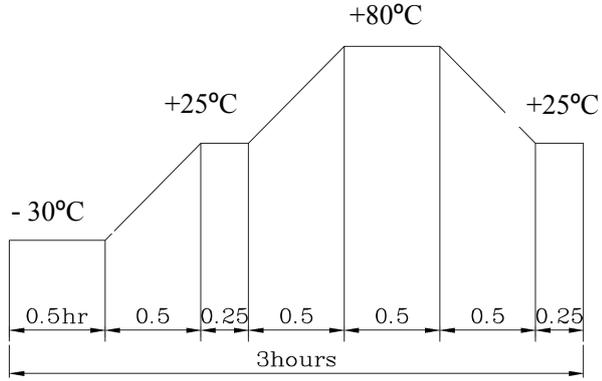


E. RECOMMENDED TEMP. PROFILE FOR REFLOW OVEN



| Profile Feature | Pb-Free Assembly |
|--|------------------|
| Average ramp-up rate(T_L to T_p) | 3°C/second max. |
| Preheat | |
| -Temperature Min.(T_{smin}) | 150°C |
| -Temperature Min.(T_{smax}) | 200°C |
| -Temperature Min.(t_s) | 60~180 seconds |
| T_{smax} to T_L | |
| -Ramp-up Rate | 3°C/second max. |
| Time maintained above: | |
| - Temperature(T_L) | 217°C |
| -Time(T_L) | 60~150 seconds |
| Peak temperature(T_p) | 245°C+0/-5°C |
| Time within 5°C of actual Peak temperature (t_p) | 6 seconds max. |
| Ramp-down Rate | 6°C/second max. |
| Time 25°C to Peak Temperature | 8 minutes max. |

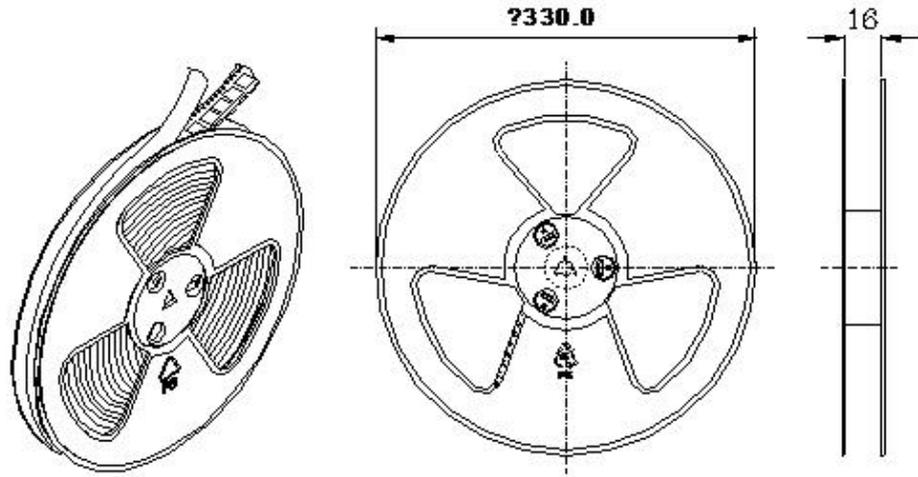
F. RELIABILITY TEST

| NO. | ITEM | TEST CONDITION AND REQUIREMENT |
|-----|---------------------------------|---|
| 1 | High Temperature Test (Storage) | After being placed in a chamber with $80\pm 2^{\circ}\text{C}$ for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: $\pm 10\text{dB}$. |
| 2 | Low Temperature Test (Storage) | After being Placed in a chamber with $-30\pm 2^{\circ}\text{C}$ for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: $\pm 10\text{dB}$. |
| 3 | Humidity Test | After being Placed in a chamber with 90-95% R.H. at $40\pm 2^{\circ}\text{C}$ for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: $\pm 10\text{dB}$. |
| 4 | Temperature Cycle Test | <p>The part shall be subjected to 5 cycles. One cycle shall be consist of :</p>  <p>The diagram shows a temperature cycle profile over a total duration of 3 hours. The cycle consists of five temperature levels: -30°C, $+25^{\circ}\text{C}$, $+80^{\circ}\text{C}$, $+25^{\circ}\text{C}$, and -30°C. The durations for each level are: -30°C (0.5 hr), $+25^{\circ}\text{C}$ (0.5 hr), $+80^{\circ}\text{C}$ (0.25 hr), $+25^{\circ}\text{C}$ (0.5 hr), and -30°C (0.5 hr). There are also 0.25 hr intervals between the $+25^{\circ}\text{C}$ and $+80^{\circ}\text{C}$ levels, and between the $+80^{\circ}\text{C}$ and $+25^{\circ}\text{C}$ levels. The total duration is 3 hours.</p> <p>Allowable variation of SPL after test: $\pm 10\text{dB}$.</p> |
| 5 | Drop Test | Drop on a hard wood board of 4cm thick, any directions ,6 times, at the height of 75cm . Allowable variation of SPL after test: $\pm 10\text{dB}$. |
| 6 | Vibration Test | After being applied vibration of amplitude of 1.5mm with 10 to 55 Hz band of vibration frequency to each of 3 perpendicular directions for 2 hours . Allowable variation of SPL after test: $\pm 10\text{dB}$. |
| 7 | Solderability Test | Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of $+300\pm 5^{\circ}\text{C}$ for 3 ± 1 seconds . 90% min. lead terminals shall be wet with solder (Except the edge of terminals). |
| 8 | Terminal Strength Pulling Test | The force of 9.8N(1.0kg) is applied to each terminal in axial direction for 10 seconds. No visible damage and cutting off. |

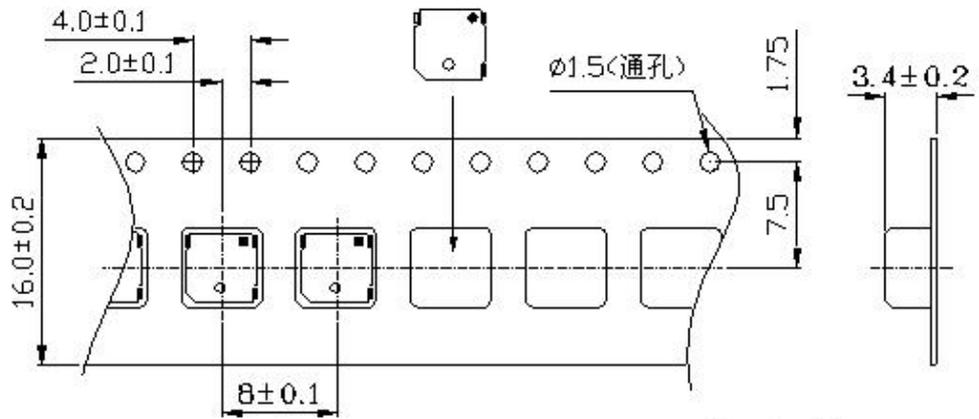
TEST CONDITION

Standard Test Condition : a) Temperature : $+5 \sim +35^{\circ}\text{C}$ b) Humidity : 45-85% c) Pressure : 860-1060mbar
Judgment Test Condition: a) Temperature : $+25\pm 2^{\circ}\text{C}$ b) Humidity : 60-70% c) Pressure : 860-1060mbar

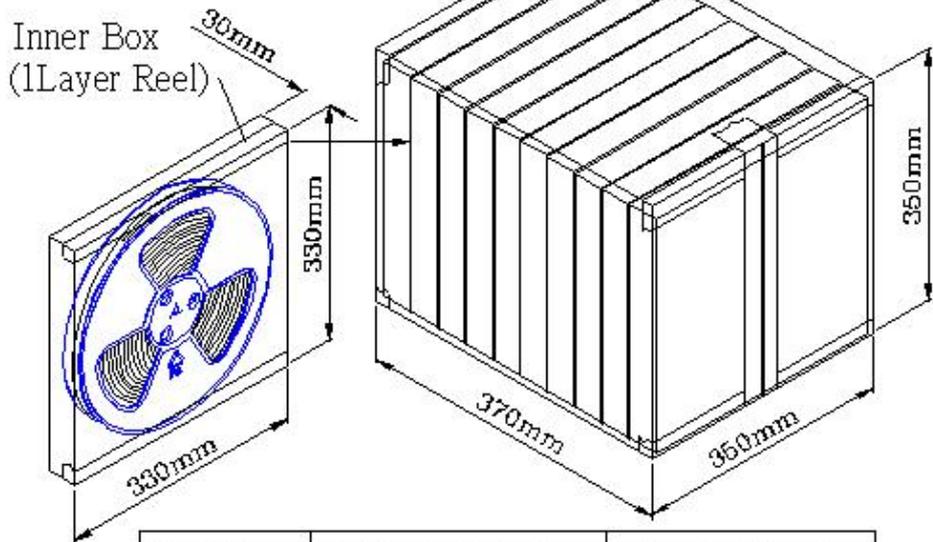
G. PACKING STANDARD



1 Reel : 2500PCS



Carton Box
(10 Inner Box)



| | | |
|------------|-------------------|----------------------|
| Inner Box | 330mmx330mmx30mm | 1x2500PCS=2500PCS |
| Carton Box | 350mmx350mmx370mm | 10x2500PCS=25,000PCS |

