

Magnetic-SMT Buzzer with oscillator

Electrical and Acoustical Parameter

| | |
|----------------------|--------------------------------|
| Rated Voltage | 12 VDC |
| Operating Voltage | 8 - 15 VDC |
| Current Consumption | ≤30 mA * |
| Sound Pressure Level | ≥90 dB(A) at 10 cm * |
| Resonance Frequency | 2300 ±300 Hz * |
| Remark | * Applying rated voltage (VDC) |

Mechanical and Environmental Parameter

| | |
|------------------------|---------------|
| Contact / Wire | SMT |
| Contact / Wire Plating | Sn |
| Operating Temperature | -40 to +85 °C |
| Storage Temperature | -40 to +90 °C |
| Housing Material | PPS |
| Housing Colour | Gray |
| MSL Level | 3 |
| Component Weight | 3.0 g |

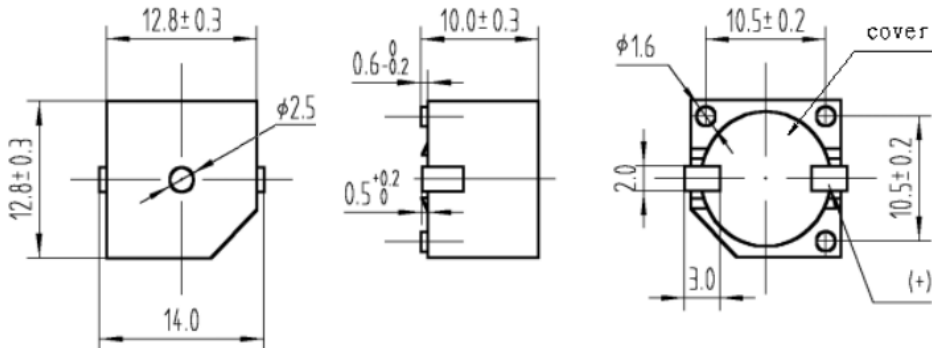


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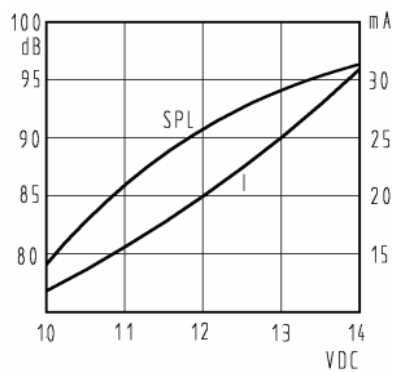
Drawing of Component

Tolerance ± 0.5 mm except specified

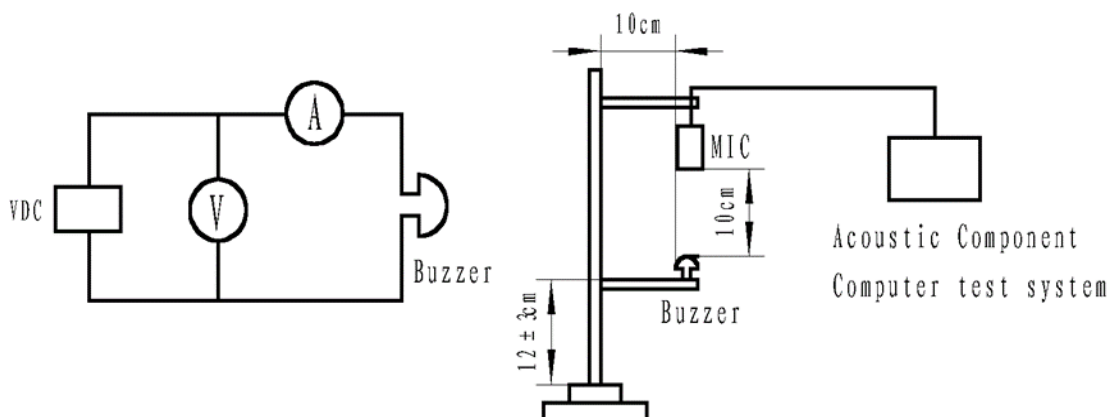


Schematic Diagrams and Characteristics

Input Voltage VS. Sound Pressure Level & Current Consumption



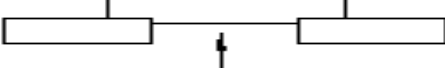
Test Method



| | | | | |
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Reliability Test

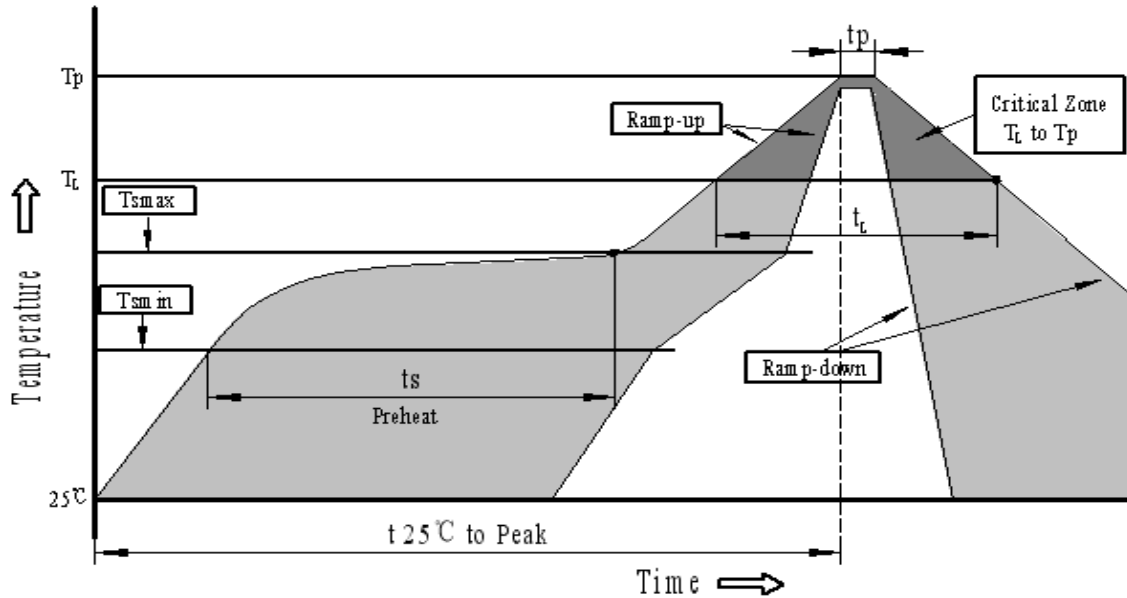
| ITEM | TESTING CONDITION | VARIANCE AFTER TEST |
|-------------------------|--|---|
| High temp. storage life | The part shall be capable of withstanding a storage temperature is +90 °C for 120 hours | After the test the part shall meet specifications without any degradation in appearance and performance except SPL shall be initial value ±10 dB or more. |
| Low temp. storage life | The part shall be capable of withstanding a storage temperature is -40 °C for 120 hours | |
| Temp. Cycle | Total 5 cycles, 1 cycle consisting of -40 ±2 °C, 30 minutes 20 ±5 °C, 15 minutes 90 ±2 °C, 30 minutes 20 ±5 °C, 15 minutes | |
| Humidity Test | 40 ±2 °C, 90-95% RH, 120 hours | |
| Vibration Test | The part shall be subjected to a vibration cycle is 10 Hz in a period of 1 minute. Total peak amplitude shall be 1.52 mm (9.3 g). The vibration test shall consist of 2 hours per plane in each three mutually perpendicular planes for a total time of 6 hours. | |
| Shock | Sounder shall be measured after being applied shock (980 m/s ²) for each three mutually perpendicular directions to each of 3 times by half sine wave. | |
| Drop Test | Dropped naturally from 700 mm height onto the surface of 10 mm thick wooden board. 2 directions-upper and side of the part are to be applied. | |
| Lead pull | The part shall be pushed with a force of 9.8 N for 10 ±1 seconds behind the part.  | |

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Solder Profile

Recommended Temp. Profile for Reflow Oven

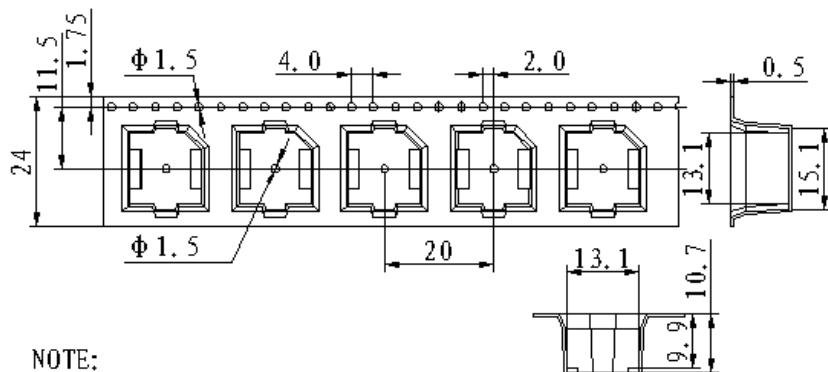


| Profile Feature | Pb-Free Assembly |
|--|------------------|
| Average ramp-up rate (TL to Tp) | 3 °C/second max. |
| Preheat: | |
| - Temperature Min. (Tsm in) | 150 °C |
| - Temperature Min. (Tsm ax) | 200 °C |
| - Temperature Min. (ts) | 60 - 180 seconds |
| Tsm ax to TL: | |
| - Ramp-up Rate | 3 °C/second max. |
| Time maintained above: | |
| - Temperature (TL) | 217 °C |
| - Time (TL) | 60 - 150 seconds |
| Peak temperature (Tp) | 242.5 ±2.5 °C |
| Time within 5 °C of actual Peak temperature (tp) | 6 seconds max. |
| Ramp-down Rate | 6 °C/second max. |
| Time 25 °C to Peak Temperature | 8 minutes max. |

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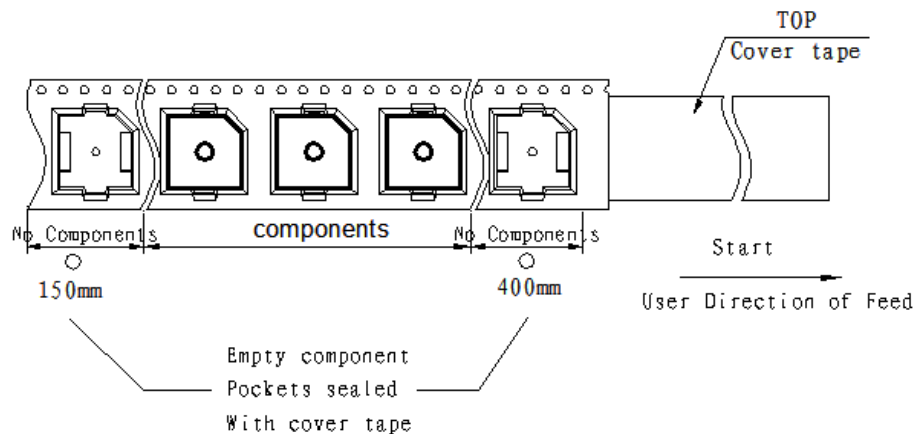
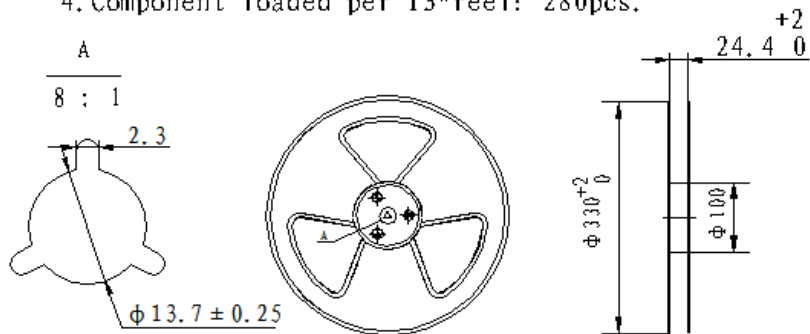
Magnetic-SMT Buzzer with oscillator

Packaging Information



NOTE:

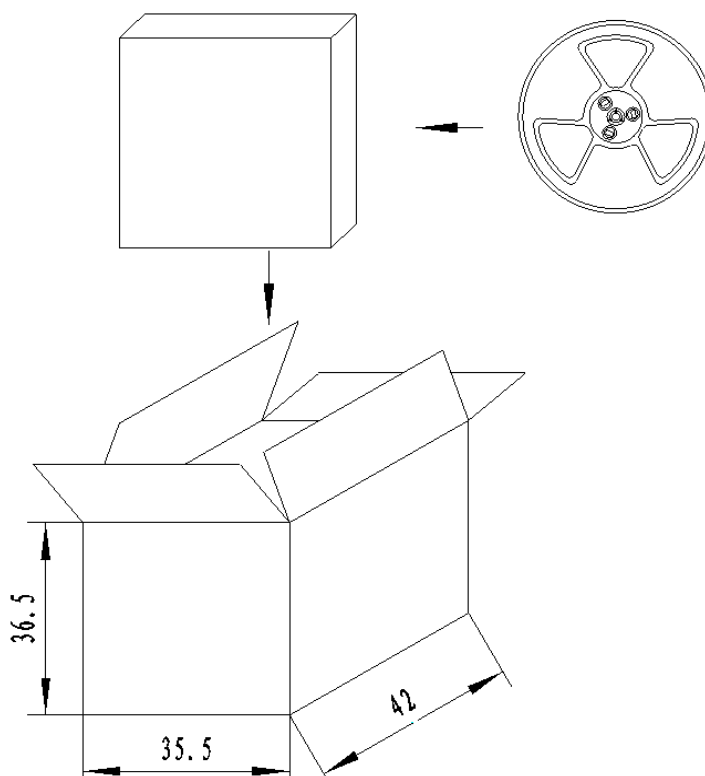
1. 10 sprocket hole pitch cumulative tolerance $\pm 0.2\text{mm}$.
2. All dimensions meet EIA-481-D requirements.
3. Thickness: $0.5 \pm 0.05\text{mm}$.
4. Component loaded per 13" reel: 280 pcs.



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Packaging Information



NOTES:

1. 280 PCS per box
2. Total 7 boxes per carton
3. Total 1960 PCS per carton

Revision Table

| Index Nr. | Reason - Procedure Change description | Date | Name |
|-----------|---|------------|------|
| 01 | Update Drawing number, new datasheet layout, Update Drawing, Reliability Test, Solder Profile, Packaging | 12.10.2018 | UB |
| 02 | New design, change Operating Voltage | 14.04.2020 | TF |
| | | | |

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