

SPECIFICATION

Product Description : Electromagnetic Buzzer

Product Model : WST-1307S



211 N. First Street Minneapolis, MN. 55401

www.soberton.com

Acoustics Product Specification

Part No :

WST-1307S

Edition : A

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This specification applies Electromagnetic buzzer

SPECIFICATION

Test condition: TEMP= +25 ±2°C Related humidity= 65 ±5% Air pressure: 860 ~ 1060mbar

| Item | Unit | Specification | Condition |
|-------------------------------------|------|--------------------------|--|
| Rated Voltage | VDC | 5.0 | |
| Operating Volt | VDC | 3.0 ~ 7.0 | |
| Mean Current | Ma | Max.40 | At rated voltage direct current |
| Sound Output | dBA | 90 | At 10cm (A-weight free air) At rated voltage direct current |
| Rated Frequency | Hz | 2400 ±200 | |
| Operating Temp | °C | -30 ~ +85 | |
| Storage Temp | °C | -40 ~ +85 | |
| Dimension | mm | 12.8 × 12.8 × 7.1 | See attached drawing. |
| Weight | gram | 2.0 | |
| Material | | PPS(Gray) | |
| Terminal | | SMD Type (Plating Sn) | See attached drawing |
| Environmental Protection Regulation | | RoHS | |

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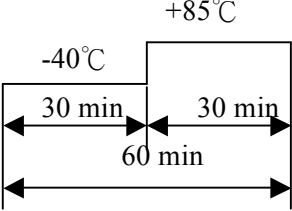
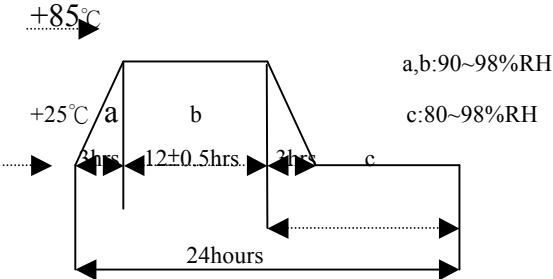
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ENVIRONMENT TEST

| | Item | Test condition | Evaluation standard |
|--|----------------------|--|---|
| | High temp. test | After being placed in a chamber at +80°C for 96 hours. | After the test the part will meet specifications without any degradation in appearance and performance except SPL, after 4 hours at +25°C . The SPL will be in ±10dBA compared with initial one. |
| | Low temp. test | After being placed in a chamber at -40°C for 96 hours. | |
| | Thermal shock | <p>The part will be subjected to 10 cycles. One cycle shall consist of</p>  | |
| | Temp./Humidity Cycle | <p>The part will be subjected to 10 cycles. One cycle shall be 24 hours and consist of;</p>  | |

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RELIABILITY TEST

| Item | Test condition | Evaluation standard |
|---------------------|---|---|
| Operating life test | <ol style="list-style-type: none">1. Ordinary temperature The part will be subjected to 96 hours of continuous operation at room temperature (+25 ±10°C) with 5V.2. High temperature The part will be subjected to 72 hours of continuous operation at +60°C with 5V applied3. Low temperature The part will be subjected to 72 hours of continuous operation at -20°C with 5V applied4. High and Low Voltage Applying 4 voltage and 7 voltage, available time 24 hours each | <p>After the test the part will meet specifications without any degradation in appearance and performance except SPL, after 4 hours at +25°C .</p> <p>The SPL would be in ±10dBA compared with initial one.</p> |

TEST CONDITION

Standard Test Condition : a)Temperature: +5~+35°C b)Humidity:45~85% c)Pressure: 860~1060mbar

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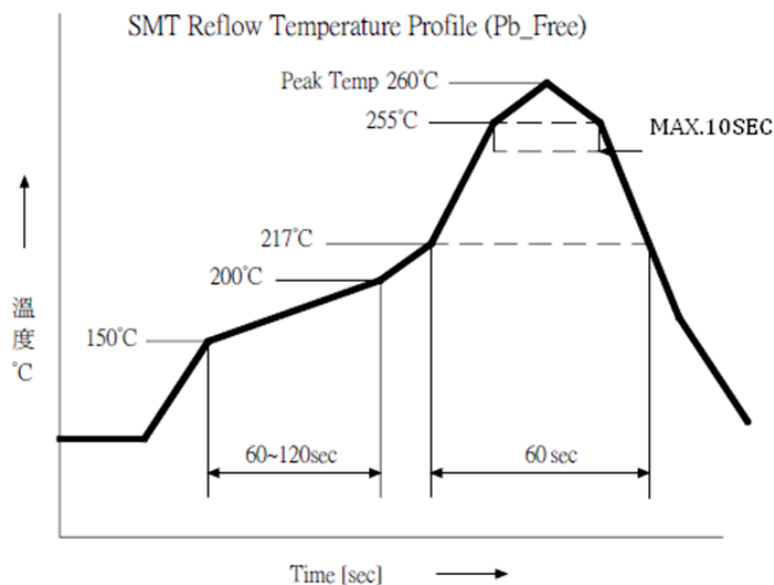
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MECHANICAL CHARACTERISTICS

| Item | Test condition | Evaluation standard |
|------------------------------|--|---|
| Solder ability | Lead terminal are immersed in rosin for 5 seconds and then immersed in solder bath of $+250 \pm 5^{\circ}\text{C}$ for 3 ± 0.5 seconds | 90% min. lead terminals shall be wet with solder No interference in operation |
| Soldering Heat Resistance | Lead terminal are immersed in soldering bath of $+250 \pm 5^{\circ}\text{C}$ for 2 ± 0.5 seconds. | |
| Terminal Mechanical Strength | Apply the terminal with 1KG strength for 1 minute | No damage and cutting off |
| Vibration | The part will be subjected to a vibration cycle of 10Hz to 55Hz to 10Hz in a period of 1 minute. Total peak amplitude will be 1.52mm(9.3G). The vibration test will consist of 2 hours per axis in each three axes(X,Y,Z). Total 6 hours | After the test the part will meet specifications without any damage in appearance and performance except SPL. |
| Drop test | The part only will 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 | The SPL would be 80dBA compared with initial one. . |

RECOMMENDED WAVE SOLDERING TEMPERATURE CURVE :



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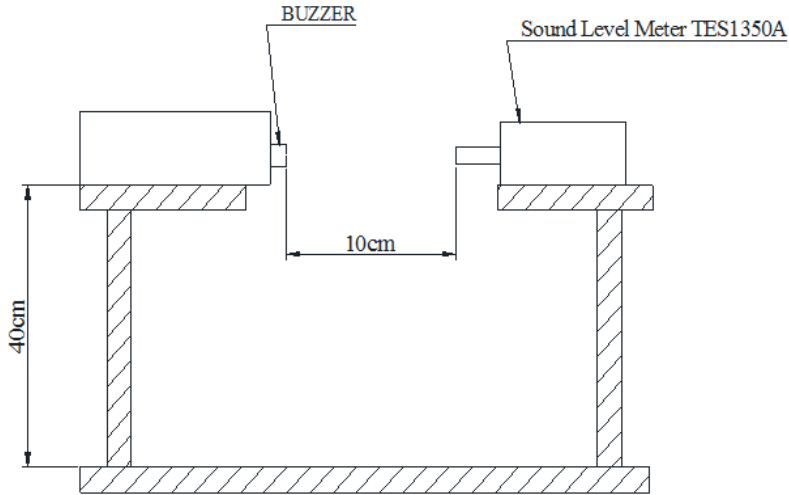
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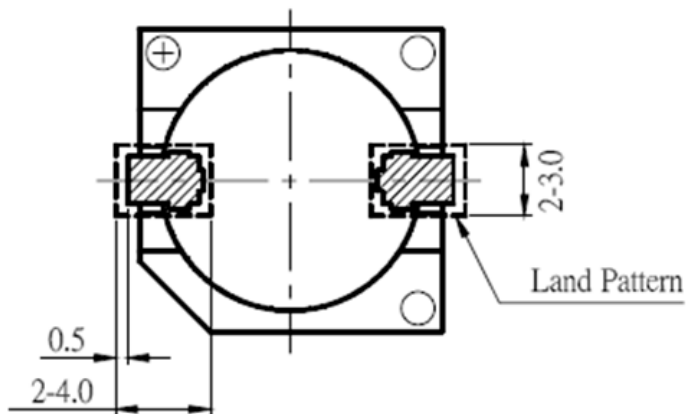
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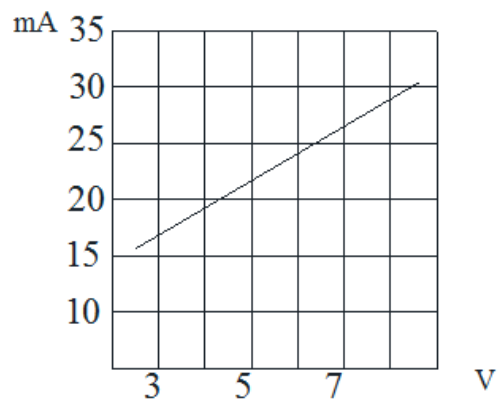
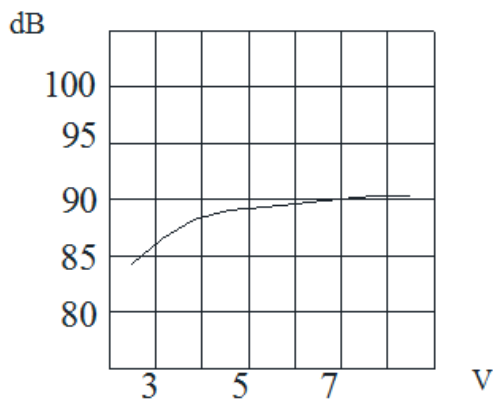
INSPECTION FIXTURE



RECOMMENDED LAND PATTERN



FREQUENCY RESPONSE



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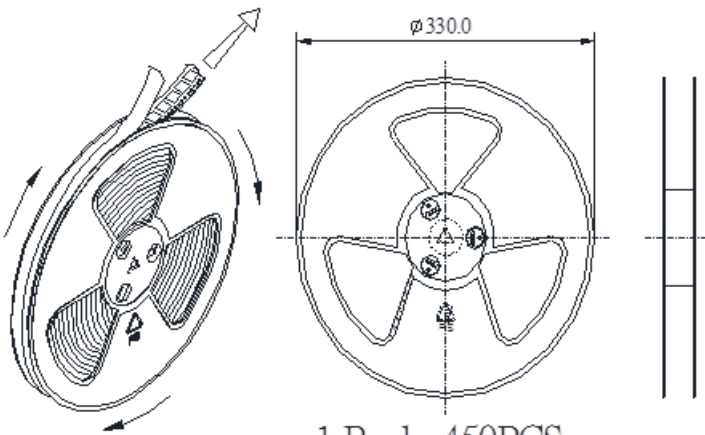
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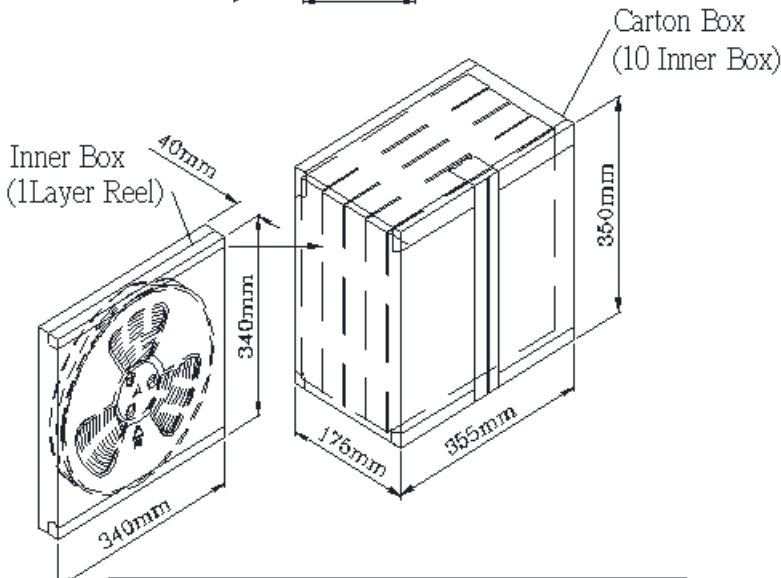
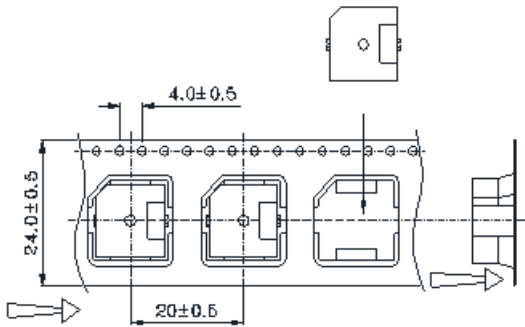
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PACKING



1 Reel : 450PCS



| | | |
|------------|-------------------|-------------------|
| Inner Box | 340mmx340mmx40mm | 1x450PCS=450PCS |
| Carton Box | 350mmx355mmx176mm | 10x450PCS=4500PCS |

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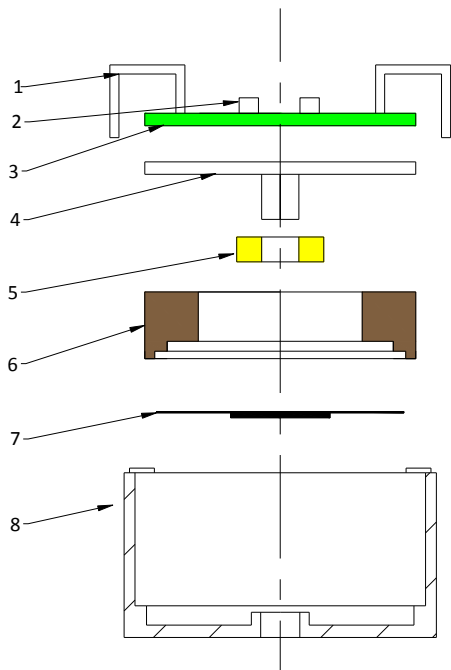
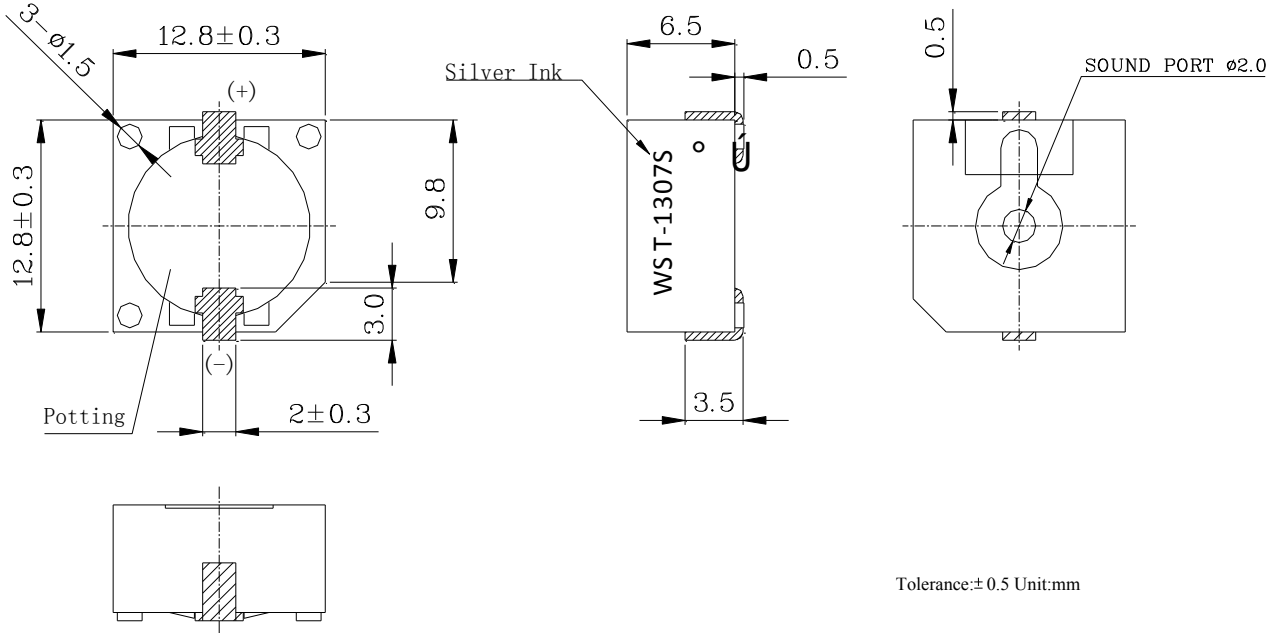
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DIMENSION



| | | | |
|-----|-------------|---------------------------------|-----|
| 8 | CASE | PPS | 1 |
| 7 | Diaphragm | Ferrum | 1 |
| 6 | Magnet ring | Poly+ ferrite | 1 |
| 5 | Coil | Copper | 1 |
| 4 | Core | Ferrum | 1 |
| 3 | PCB | Epoxy glass fiber cloth+ Copper | 1 |
| 2 | Transistor | Epoxy + Copper | 2 |
| 1 | PIN | Copper | 2 |
| No. | Components | Material | QTY |

