

**MESSRS.**

---

**SPECIFICATION FOR APPROVAL****承 認 书**

|                          |                          |
|--------------------------|--------------------------|
| <b>Product</b>           | <b>MAGNETIC BUZZER</b>   |
| <b>Part No.</b>          | <b>HS-1203A-W (RoHS)</b> |
| <b>Customer</b>          |                          |
| <b>Customer Part No.</b> |                          |

|                    |                    |                     |
|--------------------|--------------------|---------------------|
| <b>Approved By</b> | <b>Checked By</b>  | <b>Made By</b>      |
| 王台平<br>SEP-23-2020 | 曹丽萍<br>SEP-23-2020 | Lily<br>SEP-23-2020 |

**常 州 华 龙 电 子 有 限 公 司****DRAGONSTATE ELECTRONIC CORPORATION**

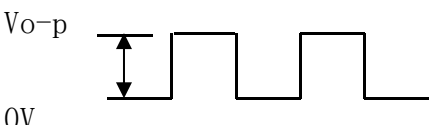
中国江苏省常州市新区新四路 36 号

Tel: +86-519-85110078. 86-519-85106698, Fax: +86-519-85101081

**EDITION:1.1**

## 1. Specifications

### HS-1203A-W(RoHS)

| Items |                           | Units        | Specifications | Conditions   |
|-------|---------------------------|--------------|----------------|--|
| 01    | Rated Voltage             | Vo-p         | 3              |                         |
| 02    | Operating Voltage         | Vo-p         | 2 ~ 4          |  |
| 03    | Consumption Current       | mA<br>(Max)  | Mean 70        | Applying rated voltage, rated frequency Square wave, 1/2 duty subject to standard state.                   |
|       |                           |              | Peak 210       |  |
| 04    | Direct Current Resistance | Ohm          | $16 \pm 2.4$   |  |
| 05    | Sound Output              | dBA<br>(min) | 88             | Distance at 10cm, applying rated voltage, rated frequency square wave, 1/2 duty subject to standard state. |
| 06    | Rated Frequency           | Hz           | 2700           |  |
| 07    | Operating Temp.           | °C           | -20 ~ +70      |  |
| 08    | Storage Temp.             | °C           | -30 ~ +80      |  |
| 09    | Weight                    | Gram         | 2              |  |

## 2. Measuring Method

### 2-1. Test Condition

Standard

Temperature : 15 ~ 35°C

Relative humidity : 25% ~ 85%,

Atmospheric pressure : 860mbar to 1060mbar.

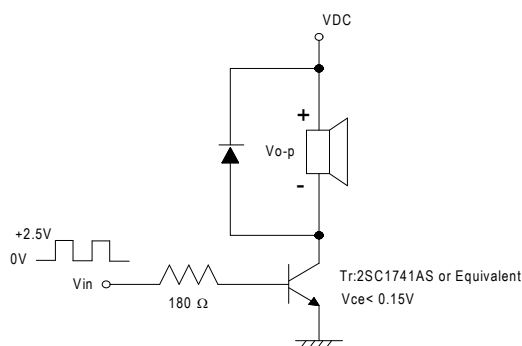
Judgement

Temperature : 20±3°C

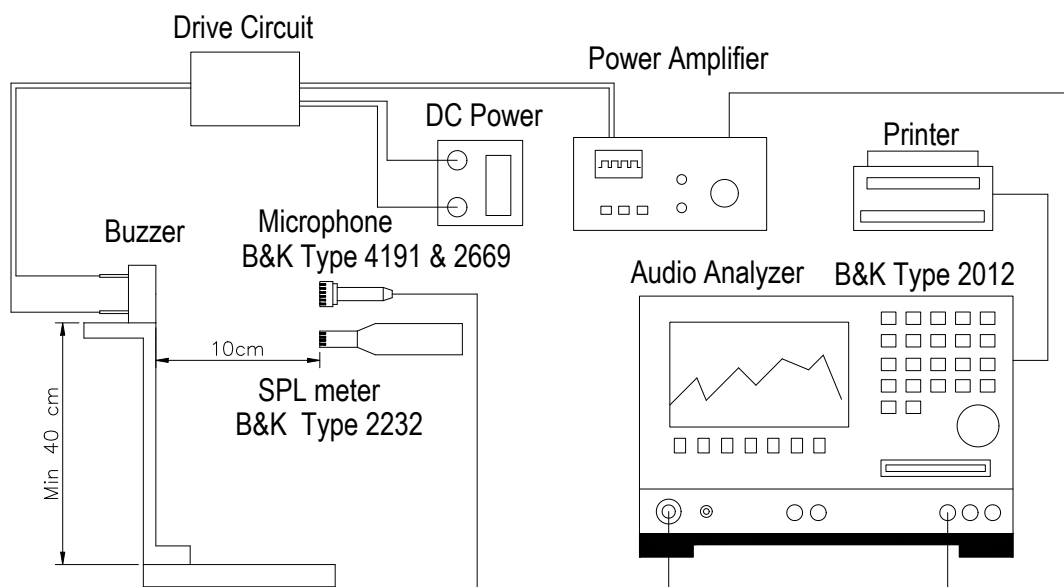
Relative humidity : 60% ~ 70%,

Atmospheric pressure : 860mbar to 1060mbar

### 2-2. Standard Drive Circuit:

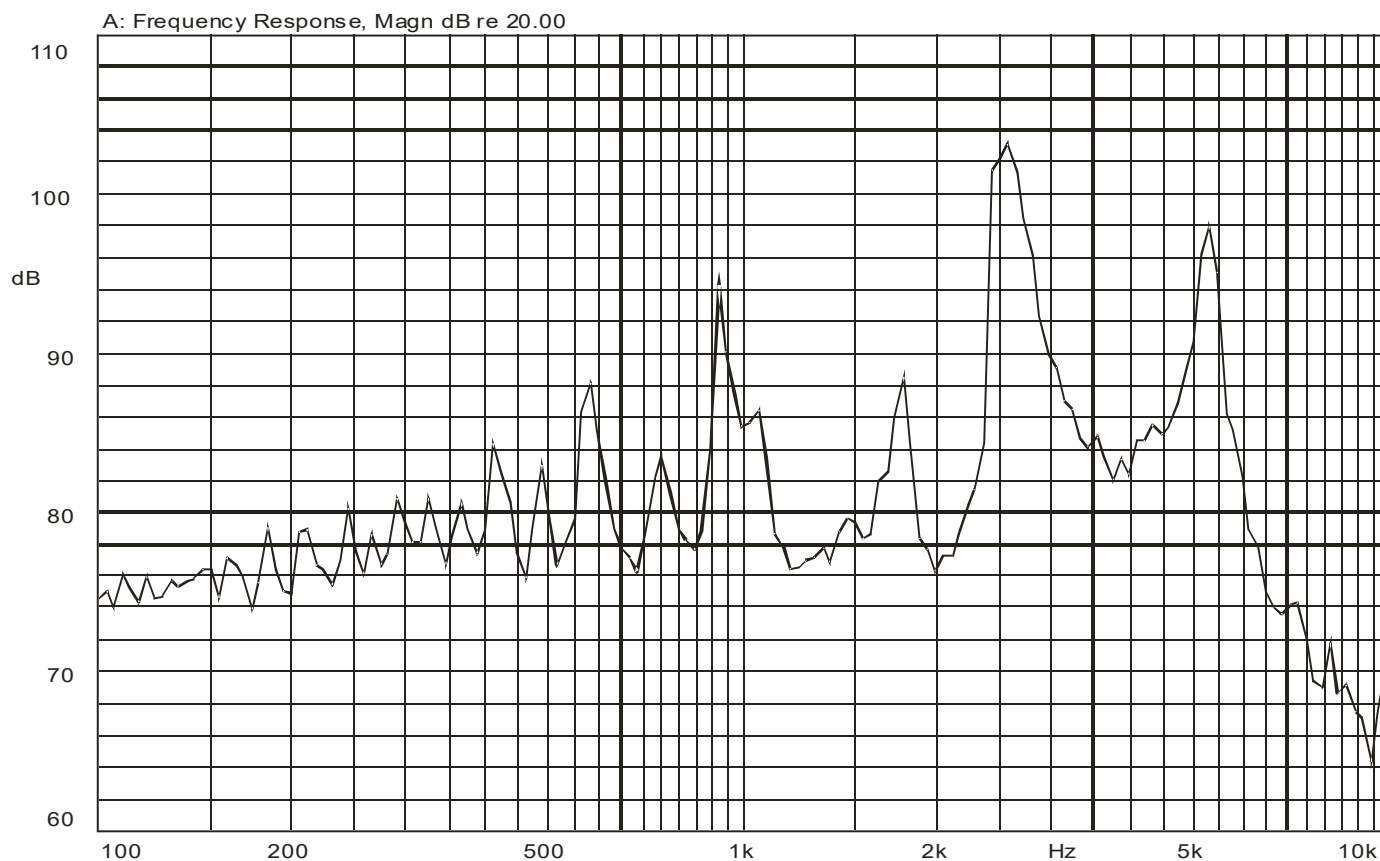


## 2-3. Standard Test Fixture

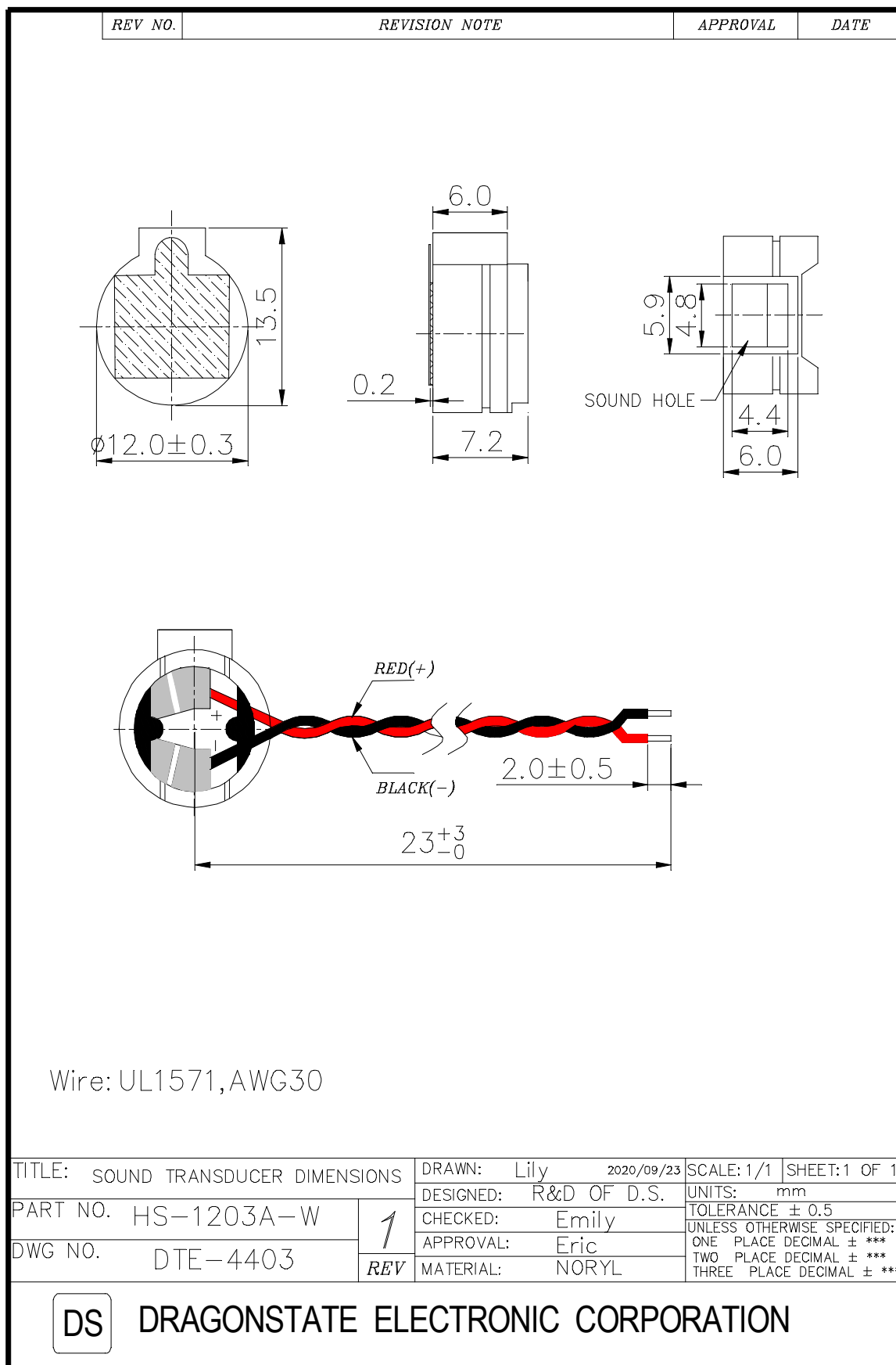


## 2-4. Frequency Response Curve

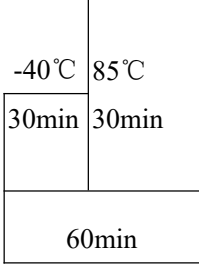
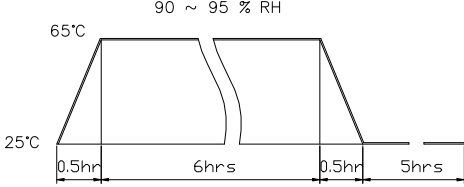
X:2.7384kHz Y:91.66dB ZA:Live Curve SSR T. RMS



### 3.Dimension

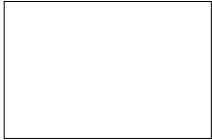

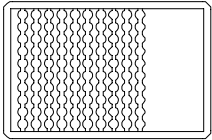
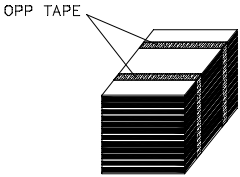

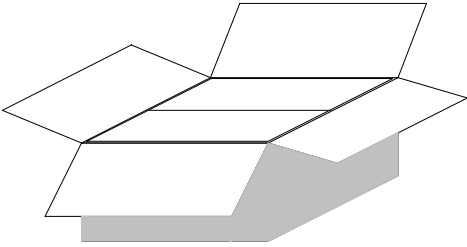


## 4. Reliability Test

| Item |                        | Test conditions   | Evaluation standard  |
|------|------------------------|---|--|
| 01   | High temp.Storage life | The part shall be capable of withstanding a storage Temperature of 95℃ for 96 hours.  | <p>After the test the part shall meet specifications without</p> <p>Any degradation in appearance and performance except S.P.L</p> <p>S.P.L shall be 87dB or more.</p> |
| 02   | Low temp.Storage life  | The part shall be capable of withstanding a storage Temperature of -50℃ for 96 hours.   |  |
| 03   | Temp. cycle            | <p>The part shall be subjected 10 cycles. One cycle shall consist of;</p>    |  |
| 04   | Temp./Humidity cycle   | <p>The part shall be subjected 10 cycles. One cycle shall be 12 hours and consist of;</p>   |  |
| 05   | Operating life         | <p>Rated Voltage,Frequency applied.</p> <p>1. Ordinary temperature</p> <p>The part shall be subjected to 1000 hours at room temperature (25 ±10℃)</p> <p>1. High temperature</p> <p>The part shall be subjected to 500 hours at 85℃</p> <p>2. Low temperature</p> <p>The part shall be subjected to 500 hours at -40℃</p> |  |
| 06   | Lead Strength          | Pull load on the direction of the lead axis for 10 ±1 sec.  |  |
| 07   | Vibration              | The part shall be subjected to a vibration cycle of 10Hz to 55Hz to 10Hz in a period of 1 minute. Total peak amplitude shall be 1.52mm (9.3G). The vibration test shall consist of 2 hours per plane in each three mutually perpendicular planes for a total time of 6 hours.   |  |

| Item |                        | Test conditions  | Evaluation standard  |
|------|------------------------|--|--|
| 08   | Fixed drop             | The part shall be mounted on standard pc board and dropped from a height of 152cm onto a concrete floor 5 times in each 6 planes.(a total of 30 times)                           | After the test the part shall meet specifications without Any degradation in appearance and performance except S.P.L<br>S.P.L shall be 87dB or more. |
| 09   | Free drop              | 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).<br>(a total of 9 times).  |  |
| 10   | Solder heat resistance | Soldering into solderbath : $350\pm5^{\circ}\text{C}$<br>Soaking time : $3.5\pm0.5$ sec  |  |
| 11   | Solder ability         | Soldering : $250\pm5^{\circ}\text{C}$ / 5 Sec.<br>$350\pm5^{\circ}\text{C}$ / 1.5 Sec<br>Soldering t into solderbath : $250\pm5^{\circ}\text{C}$<br>Soaking time : $2\pm0.5$ sec |  |
| 12   | Lead strength          | Pull lead with a force of 10N,on the direction of the lead axis for 10 : $10\pm1$ sec  |  |
| 13   | Washability            | Solvent : deionized water<br>Solvent temp. : $55\pm5^{\circ}\text{C}$<br>Soaking time : $5\pm0.5$ min.   |  |

## 5.Packing

| REV NO.  | REVISION NOTE   | APPROVAL               | DATE |
|--|---|------------------------|------|
|  | <div style="text-align: center;">  </div> <div style="text-align: right; margin-top: 10px;">           Cover(240*160*5mm)<br/>Material: Paper         </div>   |                        |      |
|  | <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> <div style="text-align: right; margin-top: 10px;">           Box(240*160*29mm)<br/>100pcs<br/>Material: Paper+Epe         </div>                    |                        |      |
|  | <div style="text-align: center;">  </div> <div style="text-align: right; margin-top: 10px;">           Middle(240*160*250mm)<br/>1000pcs(10*100pcs)<br/>Material: Paper+Epe         </div>   |                        |      |
|  | <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> <div style="text-align: right; margin-top: 10px;">           Outer Box(515*420*280mm)<br/>5000pcs(5*1000pcs)<br/>Material: Paper         </div> |                        |      |
| 单位: mm   |   |                        |      |
| TITLE: Packing   |   | DRAWN: Lily 2016/08/08 |      |
| PART NO.   |   | DESIGNED: R&D OF D.S.  |      |
| <div style="font-size: 2em; font-weight: bold;">1</div>  |   | CHECKED: Emily         |      |
|  |   | APPROVAL: Eric         |      |
| DWG NO.  |   | MATERIAL: ***          |      |
|  |   | SCALE: 2:1             |      |
|  |   | SHEET: 1 of 1          |      |
|  |   | UNITS: mm              |      |
|  |   | TOLERANCE              |      |
|  |   | 20~11 ± 0.3            |      |
|  |   | 10~5 ± 0.2             |      |
|  |   | <4 ± 0.1               |      |
| <div style="border: 1px solid black; display: inline-block; padding: 2px 5px; margin-right: 10px;">DS</div> <div style="font-size: 1.2em; font-weight: bold;">DRAGONSTATE ELECTRONIC CORPORATION</div> |   |                        |      |

