



Product Specification

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|---------------|------------------------------------|
| Product Name: | High-Output Piezo Alarm Transducer |
| Part Number: | W-05A |
| Version: | 1.02 |
| Date: | 2019-10-16 |
| Note: | |

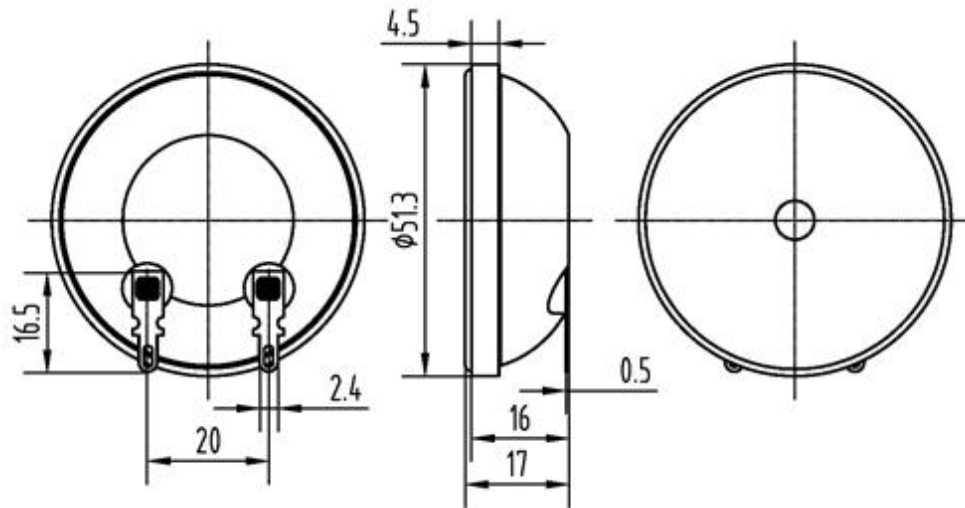
East is an ISO 9001 , IATF16949 and ISO 14001 Certified Company

Revision History

| Rev. | Description | Author/Date | Checked By | Approver |
|------|------------------------------------|-------------------|------------|----------|
| 1.02 | Quality management system revised | 汤礼东 2019-10-16 | 吕文斌 | 王建成 |
| 1.01 | Quality Certificate Symbol revised | 刘宁 2015-2-12 | 汤礼东 | 王建成 |
| 1.0 | Released | 汤礼东 2012-1-30 | 张春雷 | 王建成 |

1. Part Number W-05A

2. Dimension Drawing (Unit: mm)



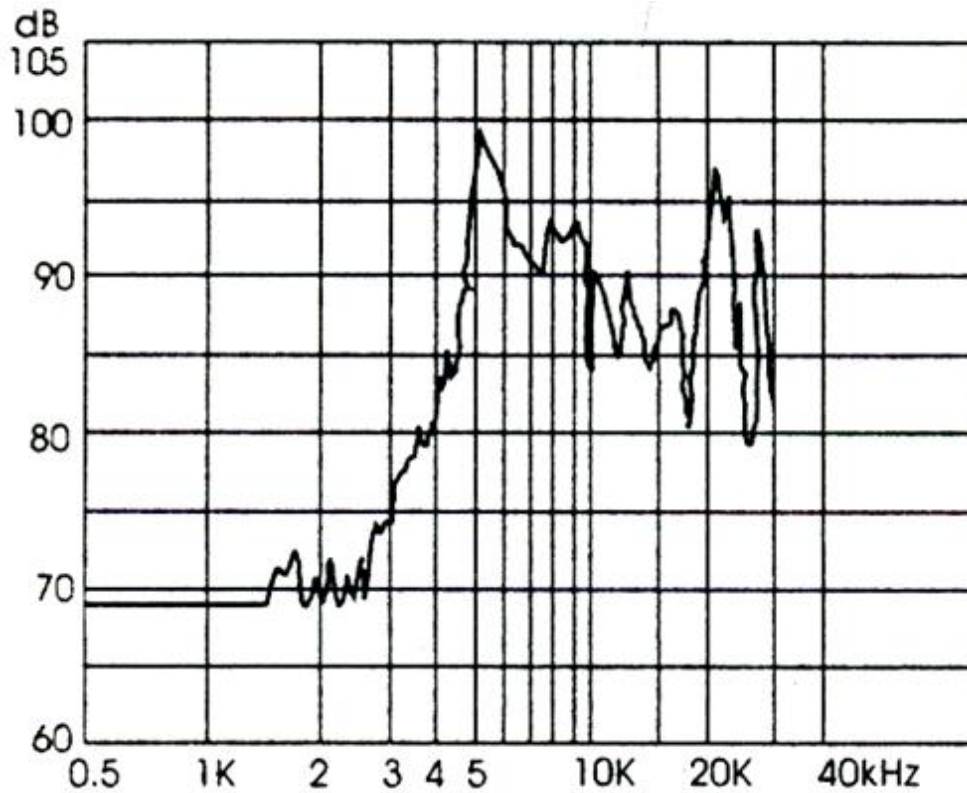
3. Specification

| No. | Item | Specification |
|-----|---------------------------|--|
| 3-1 | Min. Sound Pressure Level | 100dB/4.5±1.5kHz/2.83Vrms sine wave /50cm |
| 3-2 | Allowable Input Voltage | 30Vp-p |
| 3-3 | Capacitance | 110±30% nF (At 120Hz) |
| 3-4 | Resonant Frequency | 4.5±1.5kHz |
| 3-5 | Operating Temperature | -20~+70°C |
| 3-6 | Case Material /Color | ABS/Black |
| 3-7 | Weight | 8.5g |
| 3-8 | Pin Strength | More than 10N |

NOTES:

Test should be made under the conditions of room temperature ($20\pm 10^{\circ}\text{C}$), normal humidity ($60\pm 20\%$) and normal atmospheric pressure. In this case, however, that the judgment is questionable, the test conditions are to be changed to room temperature $20\pm 2^{\circ}\text{C}$, relative humidity 60~70% and normal atmospheric pressure

4. Typical Frequency Response Curve



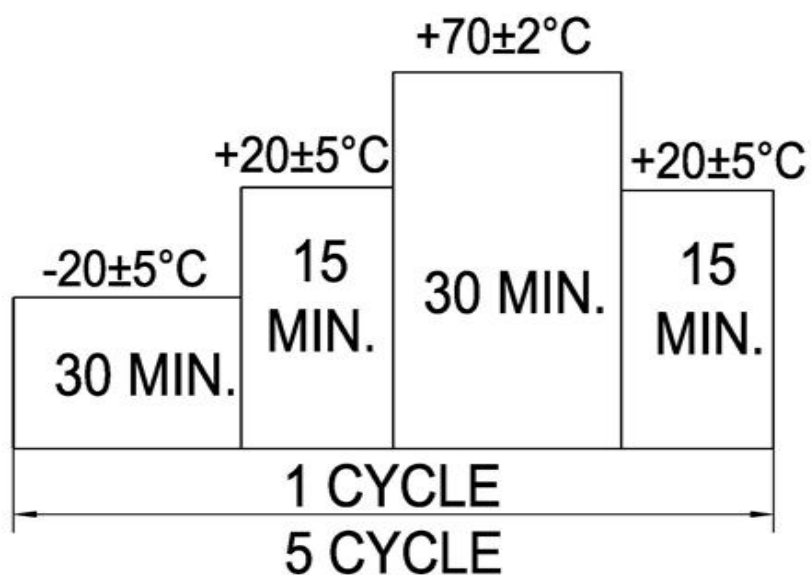
Note: Input Voltage 2.83Vrms sine wave
Distance 50cm

5. Reliability Test

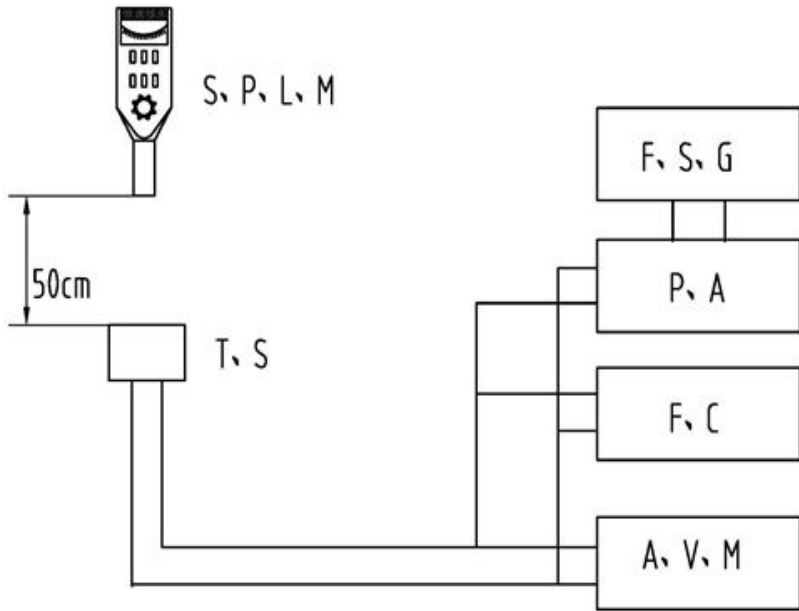
| No. | Item | Method of Test | Tolerance after Testing |
|-----|---------------------------------------|---|---|
| 5-1 | Operating Temperature | -20~+70°C | Sound pressure level initial value ± 10 dB |
| 5-2 | Storage in high temperature | Storage in +70°C test box 96 hours then exposed to the room temperature for 2 hours | |
| 5-3 | Storage in low temperature | Storage in -20°C test box 96 hours then exposed to the room temperature for 2 hours | Capacitance value $\pm 20\%$ |
| 5-4 | Life test in the room temperature | Operate the product continuously 5 seconds on 5 seconds off 300 hours at rated voltage | |
| 5-5 | Temperature / humidity cycle test | Storage in +40°C, 93 \pm 3%RH test box 96 hours then exposed to the room temperature for 2 hours | |
| 5-6 | Temperature (high and low) cycle test | Conduct the test for 5 cycles without applying power then expose to the room temperature for 2 hours.(See Figure 5-6) | |

| | | | |
|-----|--------------------------------|--|--|
| 5-7 | Vibration test | Conduct the test for the directions of X Y and Z for 0.5 hour each (total 1.5 hours). To-and Fri sweep time(from 10 to 55Hz and then 55 to 10) under single amplitude of 0.75mm is 3 minute, then expose to the room temperature for 2 hours | |
| 5-8 | Soldering heat resistance test | Dip the connecting pins in soldering at $260\pm 5^{\circ}\text{C}$ for 10 ± 1 seconds | |
| 5-9 | Test of soldering | Dip the connecting pins in soldering at $230\pm 5^{\circ}\text{C}$ for 3 ± 0.5 seconds | Solder shall be attached around over 95% of the dipped portion |

Figure 5-6



6. Electrical Testing Method



| | |
|---------|----------------------------|
| S.P.L.M | Sound Pressure Level Meter |
| T.S | Testing Sample |
| F.C | Frequency Counter |
| F.S.G | Frequency Signal Generator |
| A.V.M | AC Voltage Meter |
| P.A | Power Amplifier |

7. Packing Information

Packing: 720 pcs per export carton

Carton Size: 47× 30.5× 31 cm

G. Weight: 7.7 kgs N. Weight: 6.1 kgs