



Product Specification

Ningbo East Electronics Limited

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Product Name:	High-Output Piezo Alarm Transducer
Part Number:	W-25A
Version:	1.04
Date:	2020-10-9
Note:	

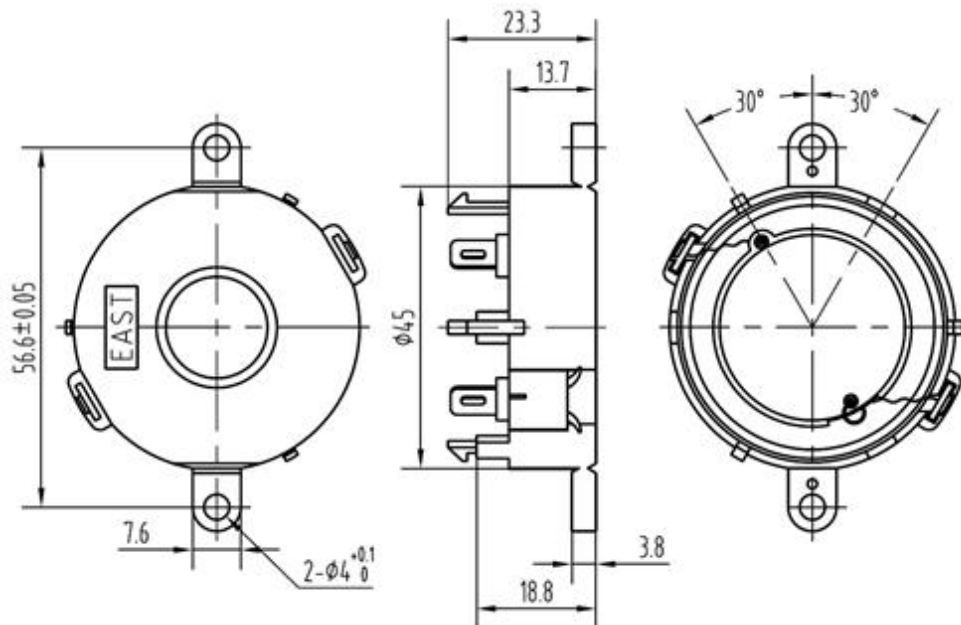
East is an ISO 9001 , IATF16949 and ISO 14001 Certified Company

Revision History

Rev.	Description	Author/Date	Checked By	Approver
1.04	Amendment Min to Max	汤礼东 2020-10-9	俞凯	王建成
1.03	Quality management system revised	汤礼东 2019-10-16	吕文斌	王建成
1.02	Add Ingress Protection	汤礼东 2016-7-20	俞凯	王建成

1. Part Number W-25A

2. Dimension Drawing (Unit: mm)



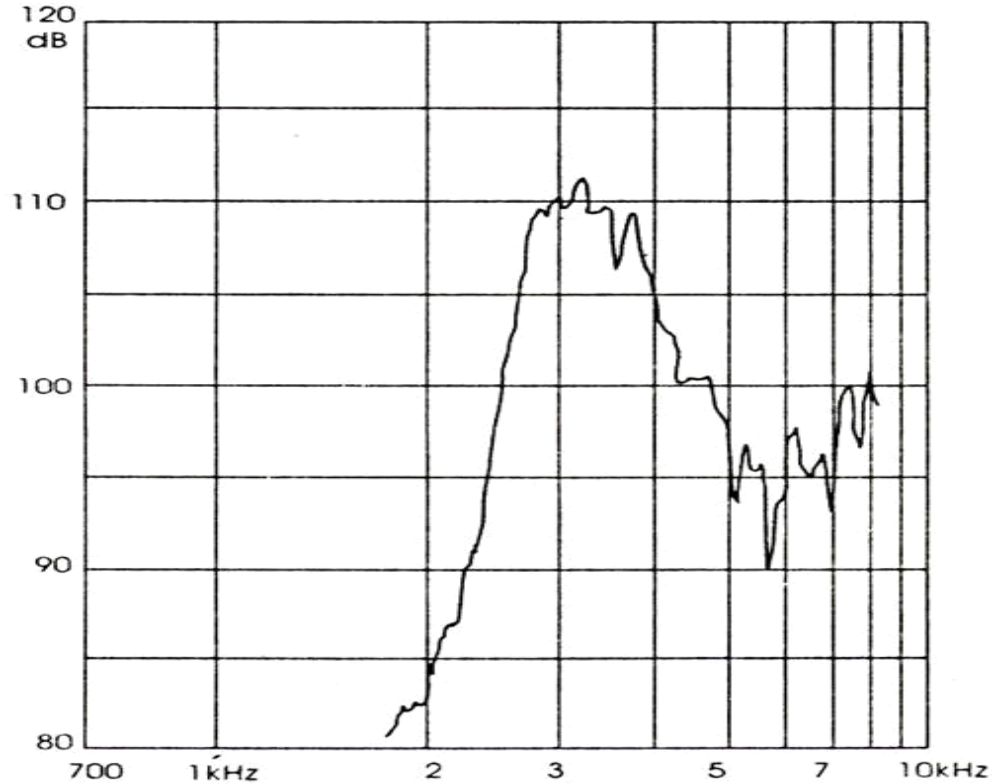
3. Specification

No.	Item	Specification
3-1	Min. Sound Pressure Level	105dB/2.2~4.0kHz/12Vp-p sine wave /1 Foot
3-2	Max. Continuous Drive Voltage at Square Wave(50% Duty Cycle)	50Vp-p
3-3	Max. Intermittent Drive Voltage at Square Wave(50% Duty Cycle)	60Vp-p
3-4	Capacitance	140±30% nF(At 120Hz)
3-5	Resonant Frequency	2.2~4kHz
3-6	Operating Temperature	-40~+85°C
3-7	Case Material /Color	PA6/Black
3-8	Ingress Protection	IP65
3-9	Weight	11.3g
3-10	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



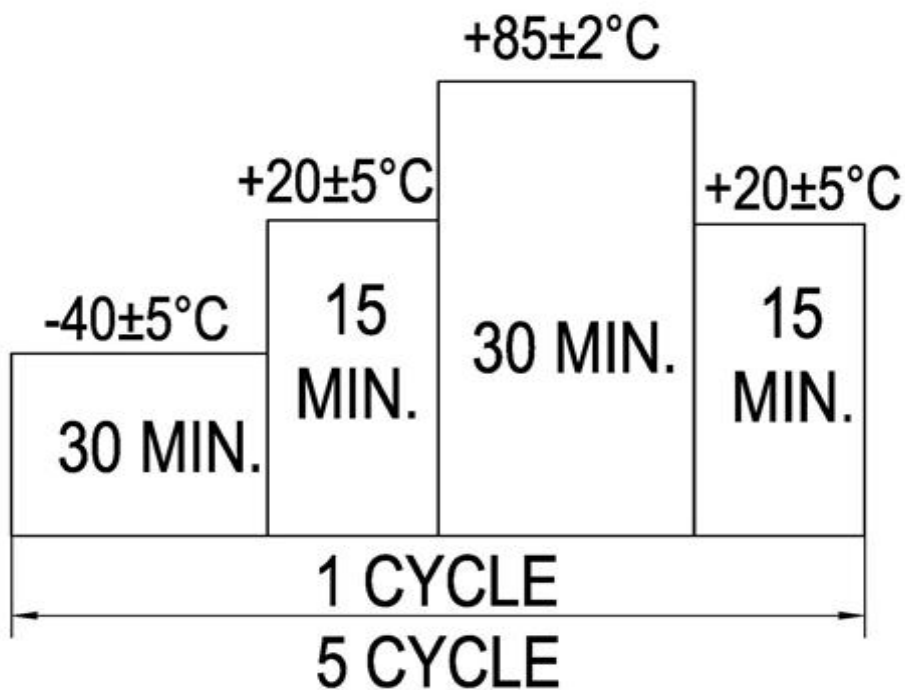
Note: Input Voltage 12Vp-p sine wave
Distance 1 Foot

5. Reliability Test

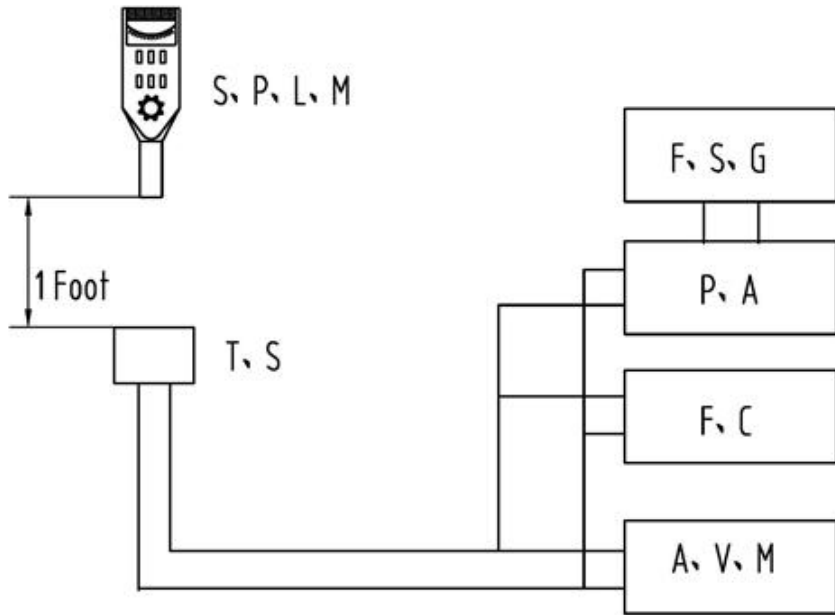
No.	Item	Method of Test	Tolerance after Testing
5-1	Operating Temperature	-40~+85°C	Sound pressure level initial value ± 10 dB
5-2	Storage in high temperature	Storage in +85°C test box 96 hours then exposed to the room temperature for 2 hours	
5-3	Storage in low temperature	Storage in -40°C test box 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 96 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	Drop test	Drop a product naturally from the height of 700mm onto the surface of 100mm thick wooden board. Two directions: upper and side of the product are to be applied for this drop test once respectively	
5-9	Soldering heat resistance test	Dip the connecting pins in soldering at $260\pm 5^{\circ}\text{C}$ for 10 ± 1 seconds	
5-10	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
NOTE: The pins are allowed to deform after drop test.			

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: 400 pcs per export carton

Carton Size: 47× 30.5× 35 cm

G. Weight: 6.3 kgs N. Weight: 4.5 kgs