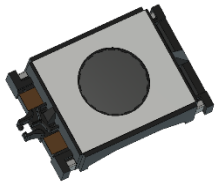
PUIaudio

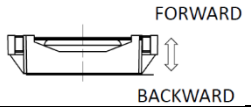


Data Sheet	HD-VA3222

Features:

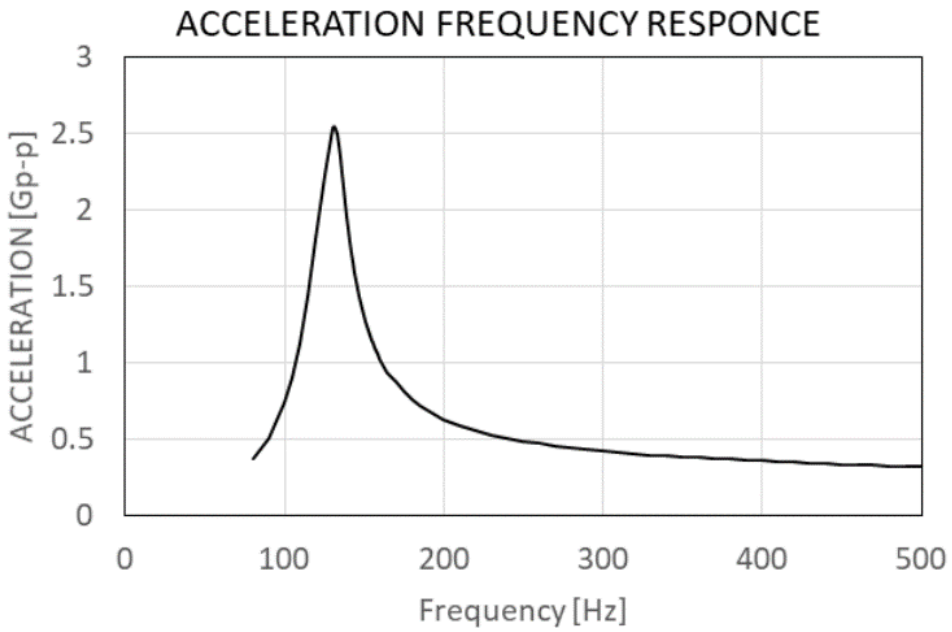
- Fast response times over a wide frequency range
- Maximum acceleration of 2.52 Gp-p measured at 133Hz
- Compact, flat design allows for a variety of implementations

Specifications

Parameters	Values				Units
Max Input Voltage	1.5				V_{rms}
DC Resistance	8.3				Ohms
Nominal Impedance	8.4 ± 0.9				Ohms
Resonant Frequency	133 ± 13				Hz
Frequency Range	80 ~ 500				Hz
Max Acceleration (@133 Hz)	2.52				Gp-p
Frequency Response Characteristics (@ 0.5V)	133 Hz	300 Hz	400 Hz	500 Hz	Gp-p
	2.52	0.41	0.33	0.28	
Rise Time 0-90%	46				ms
Fall time 100-10%	36				ms
Polarity					-
Environmental Compliances	RoHS/REACH				-
Weight	8.5				Grams
Storage Temperature	-40 ~ +105				°C
Operating Temperature	-40 ~ +85				°C

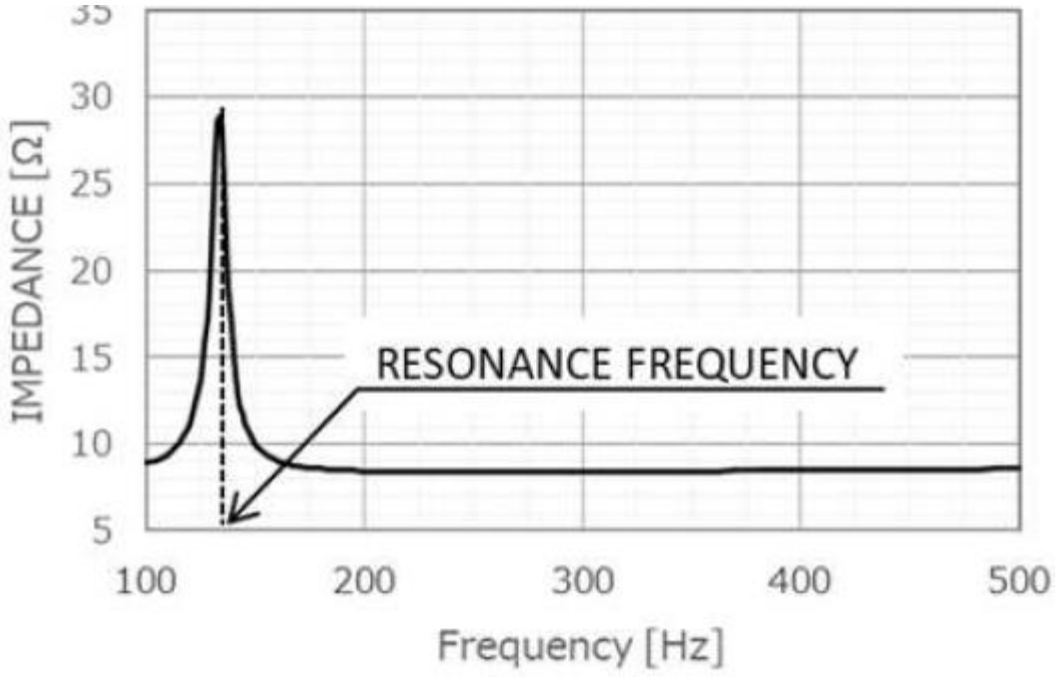
Acceleration Frequency Response

Fa [Hz]	Fa [Gp-p]	300Hz [Gp-p]	400Hz [Gp-p]	500Hz [Gp-p]
133	2.52	0.41	0.33	0.28

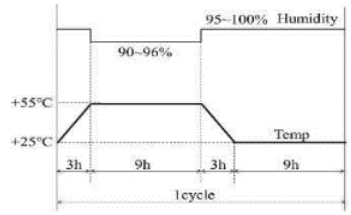
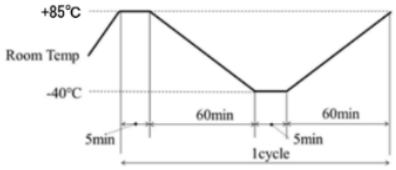


Impedance Frequency Response

Resonance Frequency [Hz]	300Hz [ohm]
132	8.4

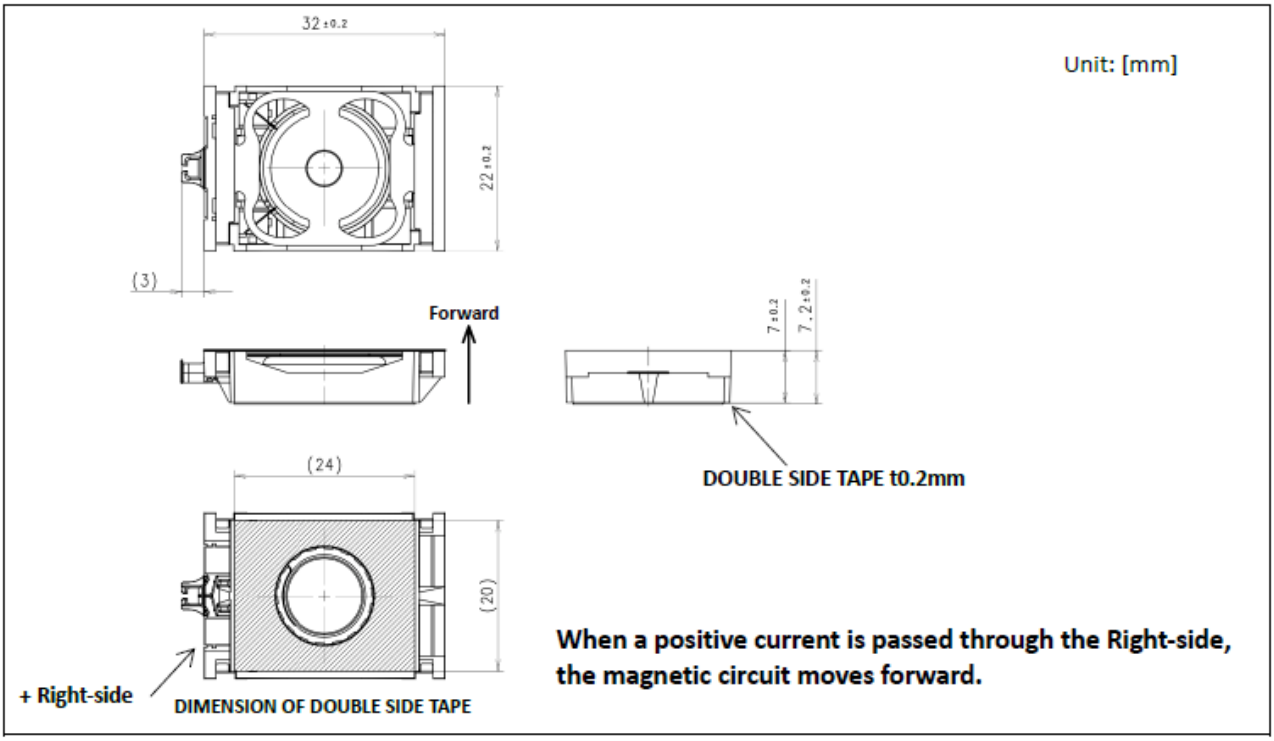


Reliability Testing

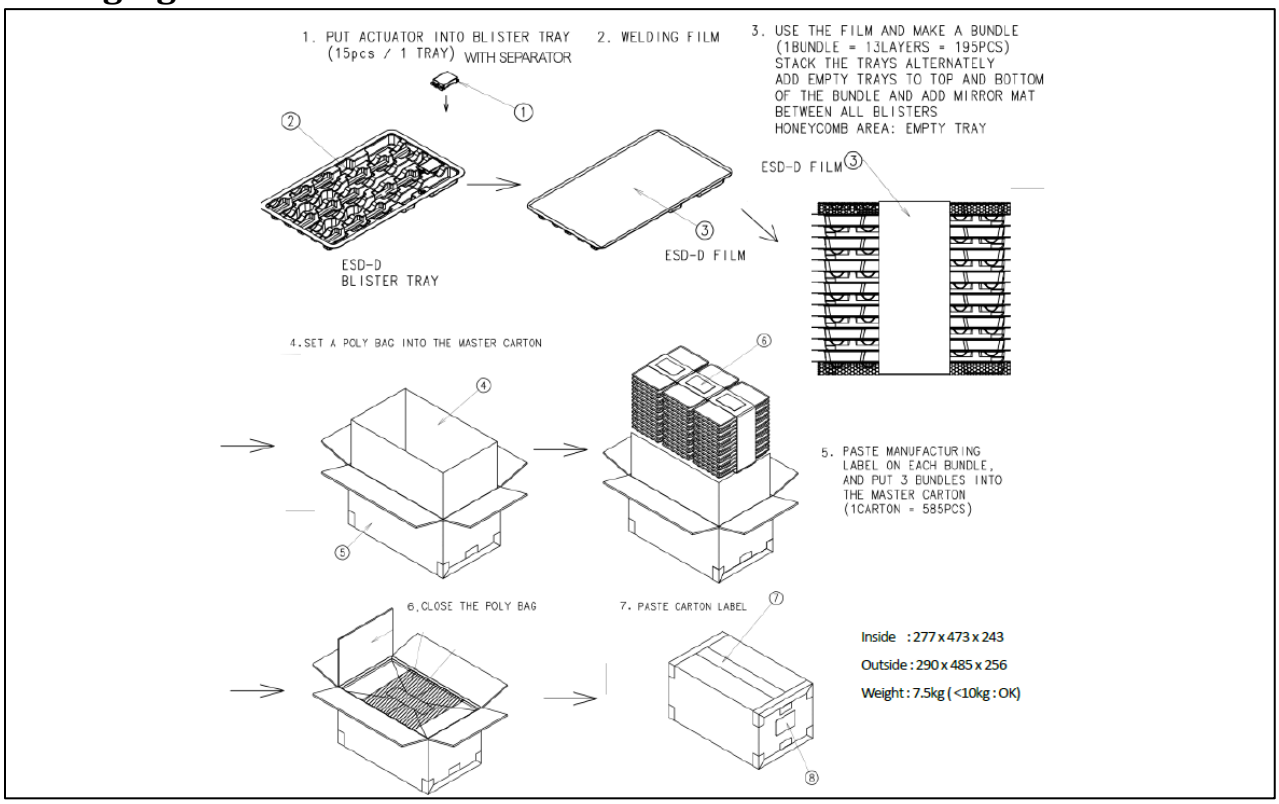
Type of Test	Test Specifications	
Damp Heat Test	Temperature: +55°C Duration: 6 cycles (144 hrs.) Input: 1.5V sine wave, 133 Hz (Fo)	
High Temperature Endurance Test	Temperature: +85°C Duration: 1478 hours Input: 1.5V sine wave, 133 Hz (Fo)	
Low Temperature Test	Temperature: -40°C Duration: 48 hours Input: 1.5V sine wave, 133 Hz (Fo)	
Temperature Cycle Testing	Duration: 540 cycles (1170 hrs.) Cycle Operation: 2°C / min. Input: 1.5V sine wave, 133 Hz (Fo)	
Drop Test	Drop from a height of 1m to the concrete ground one time in each direction XYZ	

Acceleration frequency characteristics shall be within tolerance after each test. Adhesive tape shall remain undisturbed with less than 10N of force applied.

Dimensions



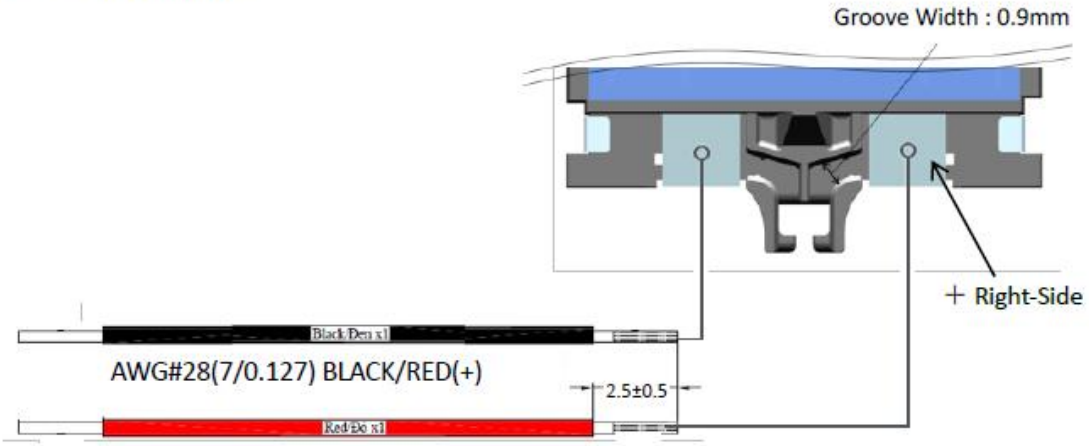
Packaging



No.	Part name	No.	Part name
①	Actuator with separator	⑤	Master carton
②	Blister tray	⑥	Manufacturing label
③	Cover sheet (Film)	⑦	Security tape
④	Poly bag	⑧	Carton label

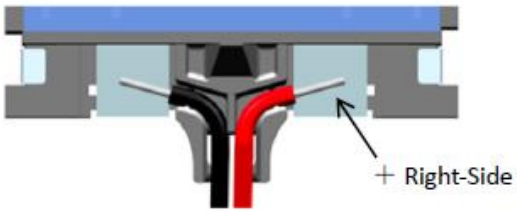
Soldering Recommendations

Recommended Cable Spec : AWG#28
推奨ケーブル : AWG#28

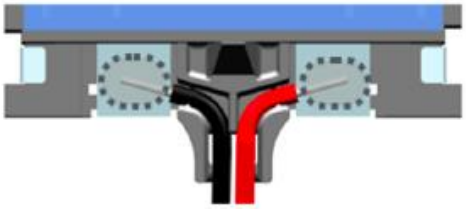


Recommended Procedure for Cable Assembly

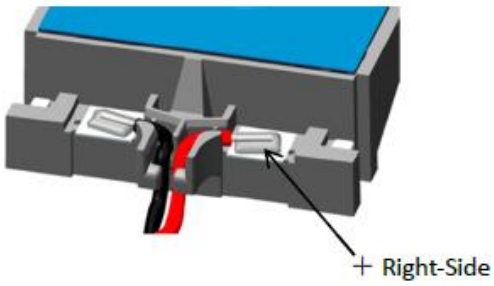
Step1:
Place two Cables to the grooves of Frame, and put the cable conductors on the terminals of Frame.



Step2:
Soldering the cable conductors with the terminals.



Step3:
Hook cables as shown below, and apply a glue to fix the cables. It may help to prevent the conductor break at soldering area.



Specifications Revisions

Revision	Description	Date
A	RELEASED FROM ENGINEERING	07/20/2022
B	Revised Acceleration Frequency Response Graph	10/25/2022

Note:

1. Unless otherwise specified:
    A. All dimensions are in millimeters.
    B. Default tolerances are ±0.5mm and angles are ±3°.ssw
2. Specifications subject to change or withdrawal without notice.