EXS 241408W B

EXCITER

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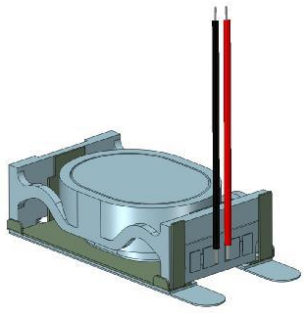
CONTENT



1. SPECIFICATIONS

Parameter	Unit	Conditions / Description	MIN	TYP	MAX
Rated Voltage	Vrms			2.83	
Operating Voltage	Vrms		0.3		3.0
Resonance Frequency	Hz		144	180	216
Frequency Response	Hz		F0		10.000
Acceleration	Grms	At 2.83Vrms, at 10g load in middle	5		
Polarity		Positive voltage to (+), Diaphragm moves forward			
Rise Time	ms	0 -> 90% At 10g load in middle, 2.83Vrms, 180Hz			60
Break Time	ms	100 -> 10% At 10g load in middle, 2.83Vrms, 180Hz			60
Contact				WIRE	
Packaging				TRAY	
Operating Temperature	°C		-40		+85
Storage Temperature	°C		-40		+105
Weight	g			5	

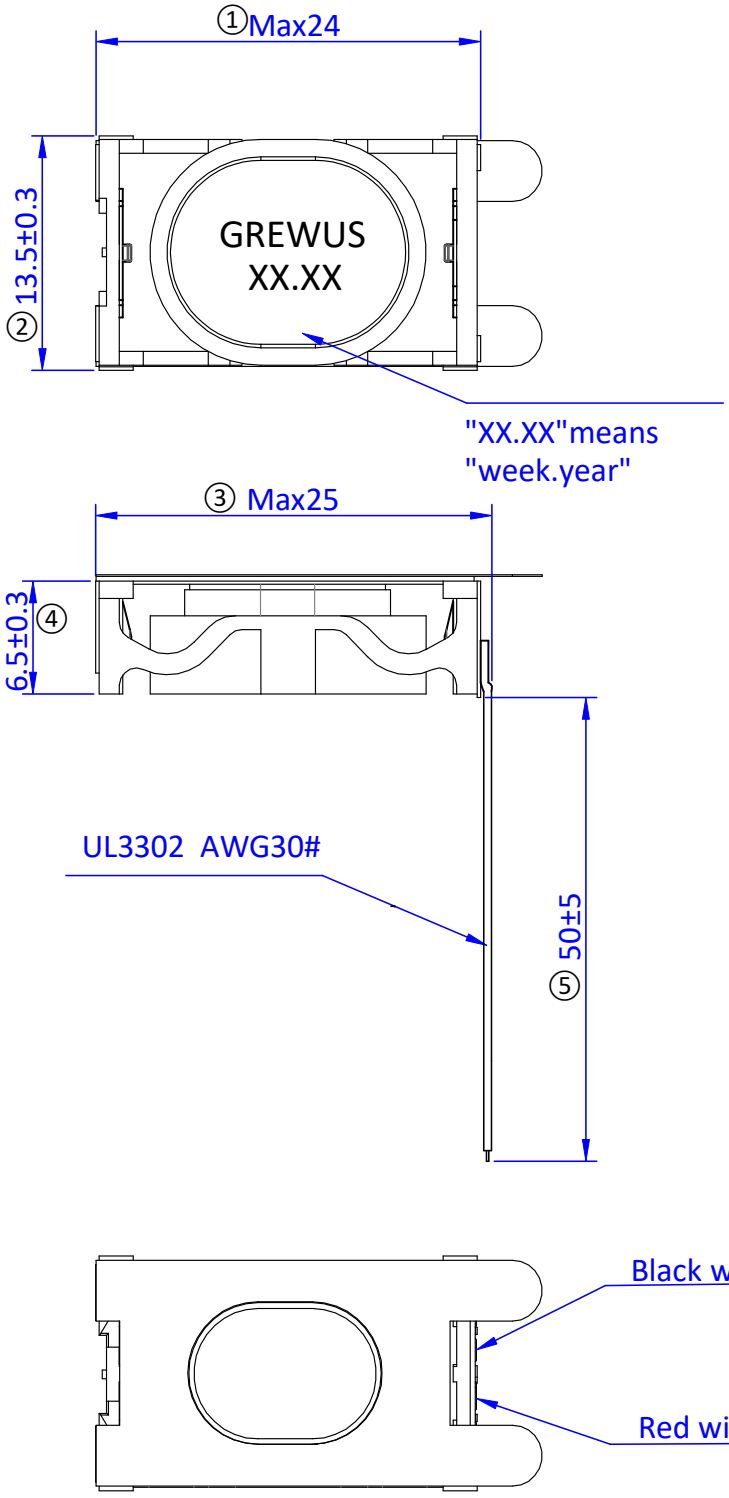
Remark:

Standard conditions for inspection and measurement:
Temperature: +15...+35°C; Humidity: 45...85%RH (no condensation of moisture)
When a judgment under standard conditions raises doubt, the following conditions apply:
Temperature: +18...+22°C; Humidity 50...60%RH (no condensation of moisture)

DESIGNED BY	Rabea Richter	DATE	2020.10.23	PART NO.	INDEX
RELEASED BY	Ralf Hinnerichs	DATE	2020.10.23	EXS 241408W B	B
CHANGED BY	Rabea Richter	DATE	2023.01.16		
DRAWING NO.	441274177				

2. DRAWING

2.1 PRODUCT DIMENSIONS



Unit: mm

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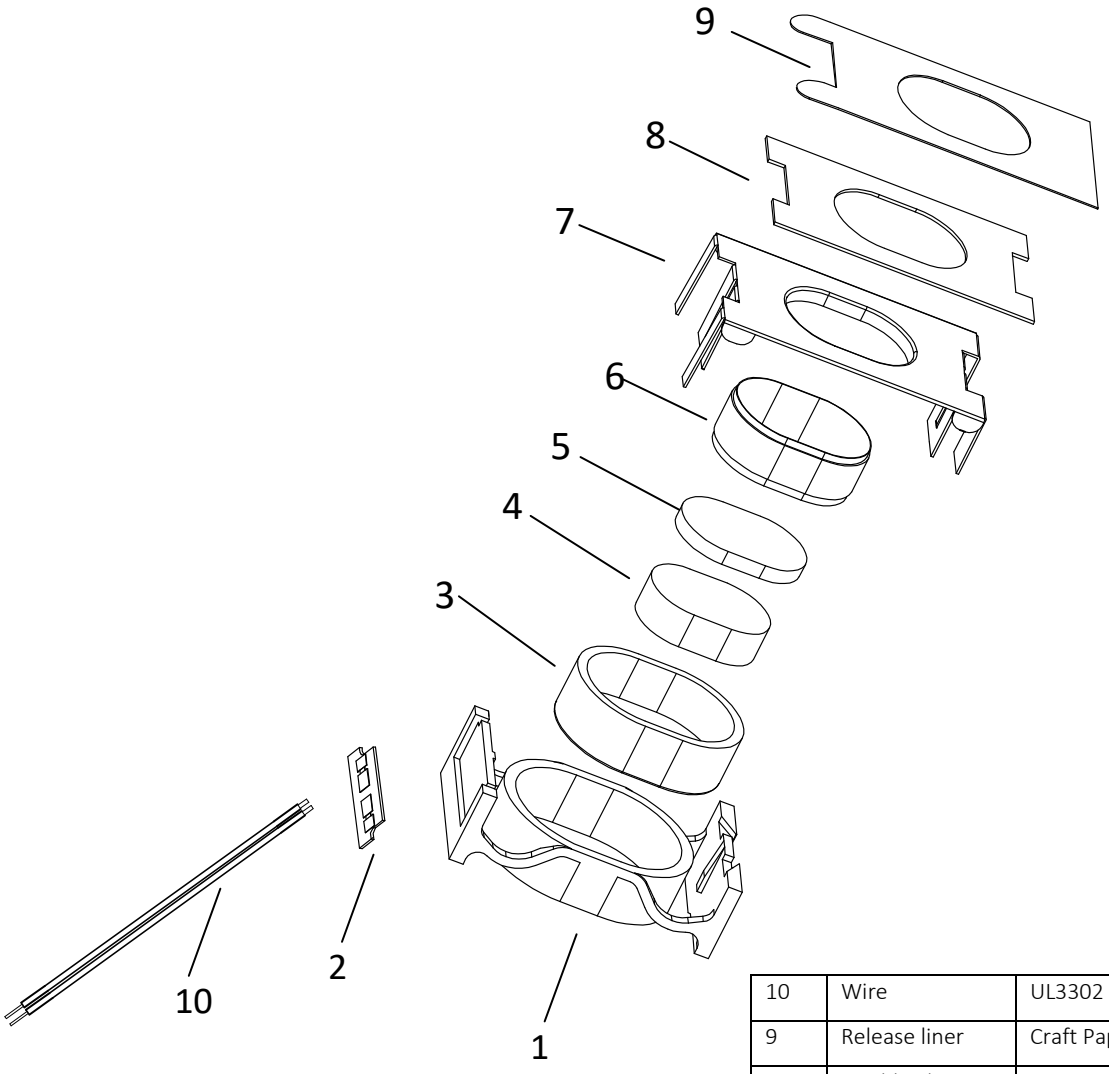
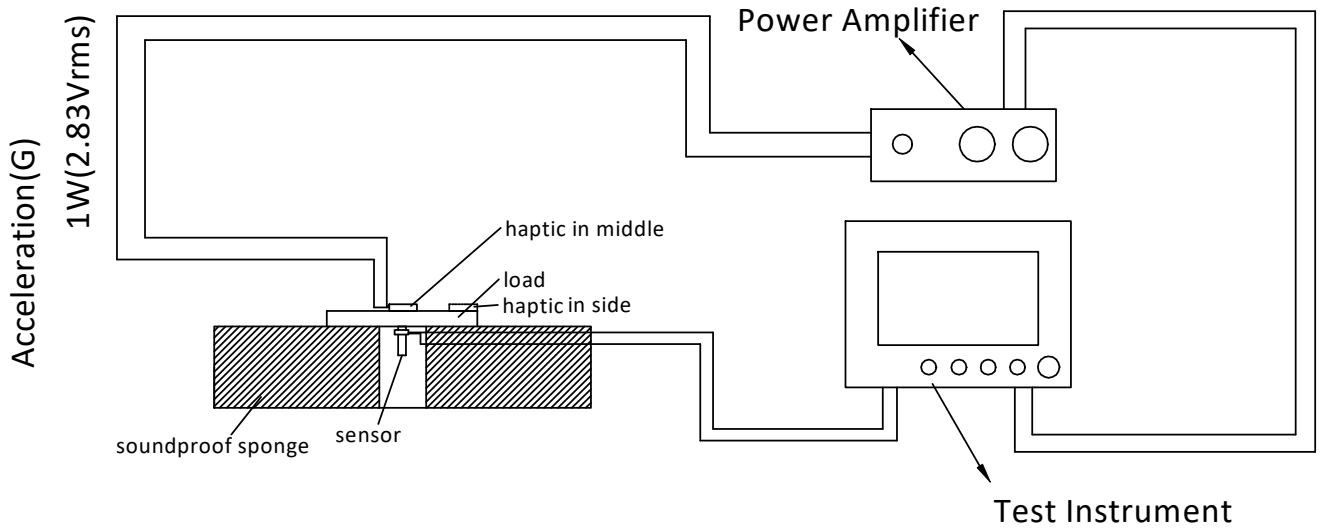
2.2 PART LIST



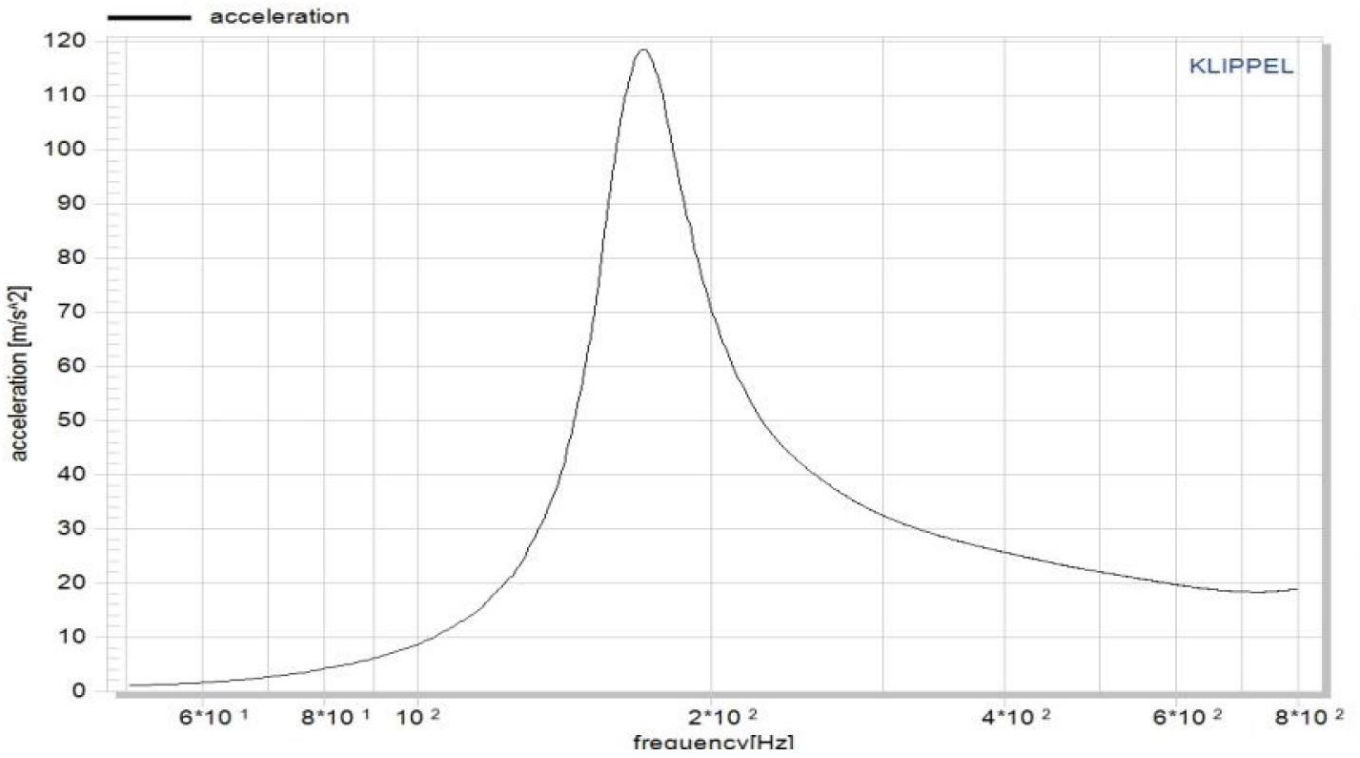
10	Wire	UL3302 AWG30#
9	Release liner	Craft Paper
8	Double glue	3M
7	Base Plate	SUS
6	Voice Coil	AL+SV
5	UP Plate	SPCC
4	Magnet	NdFeB
3	U-Yoke	SPCC
2	PCB	Epoxy+Cu
1	Frame	Plastic
No.	**Part Name**	**Material**

3. TEST METHOD

3.1 TEST SETUP



3.2 ACCELERATION CURVE (only for reference)



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4. RELIABILITY TEST

4.1 Load Test

Power (Nom)	1W, 0.5s ON/0.5s OFF
Input Signal	180Hz sine wave
Cycles	2.200.000

4.2 High Temperature Load Test

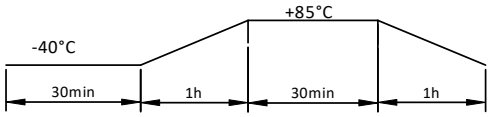
Power	1W, 0.5s ON/0.5s OFF
Temperature	+85 ±2°C
Input Signal	180Hz sine wave
Duration	720 hours

4.3 Low Temperature Load Test

Power	1W, 0.5s ON/0.5s OFF
Temperature	-40 ±2°C
Input Signal	180Hz sine wave
Duration	720 hours

4.4 Temperature Cycles Test

Power	1W, 0.5s ON/0.5s OFF
Temperature	-40~+85°C
Input Signal	180Hz sine wave
Duration	696 hours

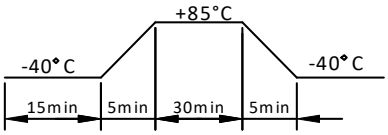


4.5 Damp Heat

Temperature	+85 ±32°C
Relative Humidity	85% RH
Duration	1000 hours

4.6 Thermal Shock Test

Temperature	-40~+85°C
Cycles	1000



4.7 Vibration Test

Vibration Frequency	55Hz
Amplitude	1.5mm
Duration x, y, z directions	30 minutes

4.8 Drop Test

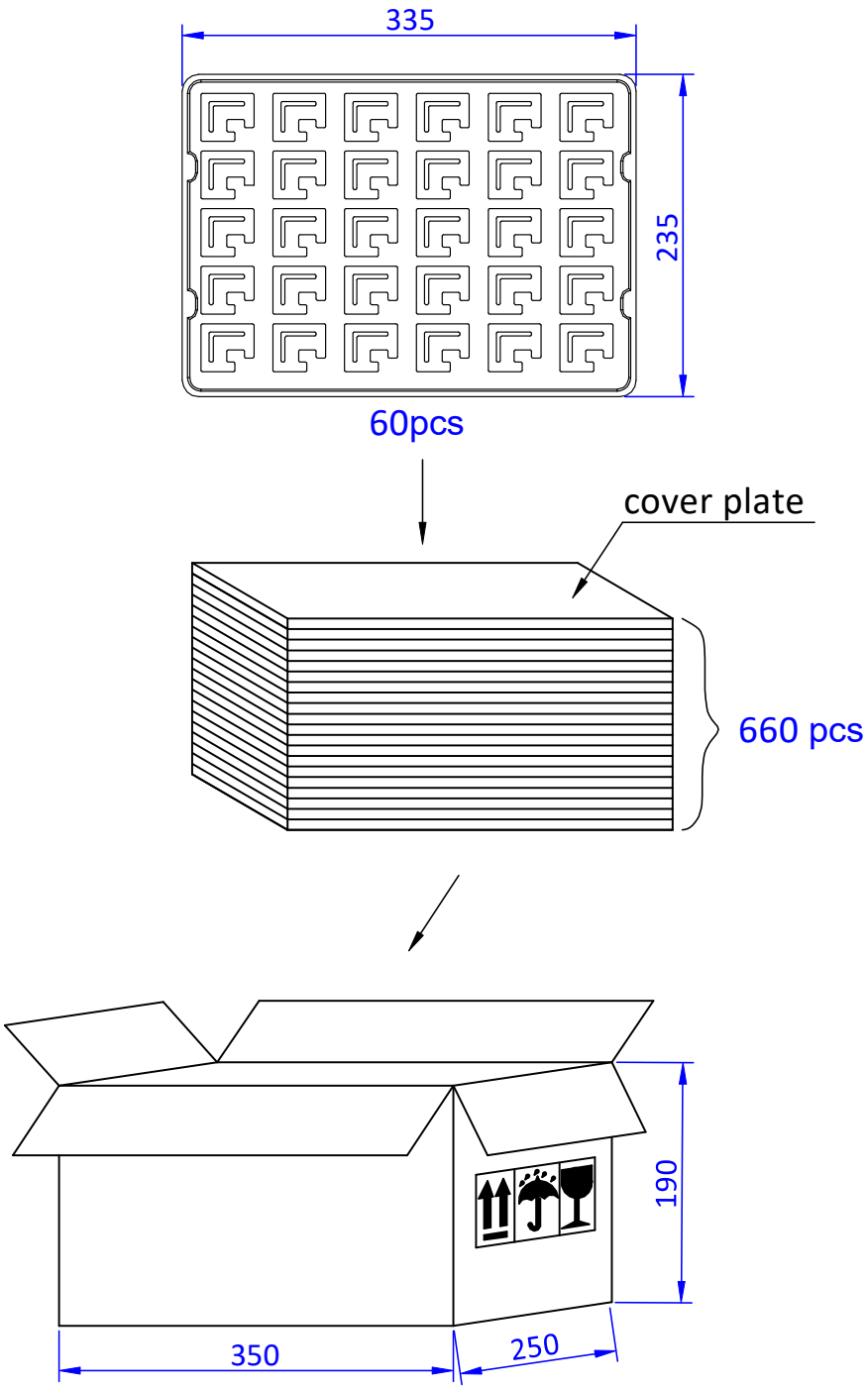
Height	70cm (to 100mm thick wooden board)
Direction	3

Notice: After the test, all electronic and acoustic characteristics should be satisfied with the specification.
Acceleration: Deviation is of ±25% of initial value.

Performance requirements after test:
1) Acceleration: ≥4.8G at 10g load in middle, 2.83Vrms
2) RT Rise Time): <72ms at 10g load in middle, 2.83Vrms, 180HZ
3) BT (Break Time): <72ms at 10g load in middle, 2.83Vrms, 180HZ
Notice: Before the experiment, it should work normally for 1 hour; after the experiment, it should be placed at room temperature for at least 4 hours to test its performance.

5. PACKING

5.1 PACKING DRAWING



5.2 PACKING QUANTITY

60pcs per tray

11 trays per carton

660pcs per carton in total

Box size 35x25x19cm

6. NOTICE

6.1 The products must not be washed

6.2 Storage Condition

The products should be stored in a room, where the temperature/humidity is stable. And avoid such places where there are large temperature changes. Please store the products at the following conditions:

Temperature: -10 to +40°C Humidity:15 to 85% R.H.

6.3 Expire Date on Storage

Expire date (Shelf life) of the products is six months after delivery under the conditions of a sealed and an unopened package. Please use the products within six months after delivery. If you store the products for a longer time (more than six months), then use them carefully because the products may be degraded in the solderability and/or rusty. Please confirm solderability and characteristics for the products regularly.

6.4 Notice on Product Storage

1) Please do not store the products in a chemical atmosphere (Acids, Alkali, Bases, Organic gas, Sulfides and so on), because the characteristics may be reduced in quality, and/or be degraded in the solderability due to the storage in a chemical atmosphere.

2) Please use the products immediately after the package is opened, because the characteristics may be reduced in quality, and/or be degraded in the solderability due to the storage under the poor condition.

6.5 Rated and Max-input power

Rated input power

Rated input power is the maximum (limit) value which can be input to the component intentionally. If the actual input power to component keeps exceeding the Rated Input power, it will damage the component acoustic performances and reliability. In the worst case, the component will get broken and no sound.

Max-input power

Max-input power is the maximum (limit) value for unexpected input power which is caused in the customer's circuit like surge voltage. If the actual input power to the component keeps exceeding the maximum input power, it will break the component and cause no sound in a short time. Please note that the components will have a risk to get broken if the unexpected input power continues.

The value of input power is set based on the sinusoidal power in the normal speaker use. If the special signal is input to component, the values of Rated and Max-input power will be different. Please make a well-investigation at your laboratory in the case of the special signal input.

7. HISTORY CHANGE RECORD

REV	CHANGE ITEMS		DATE
	BEFORE CHANGE	AFTER CHANGE	
B	Rated input power 2W, max. 3W Impedance 8 ±15% Ω Resonance Frequency 180 ±10%Hz Acceleration ≥6 Grms@10g jig at 1W	Remove Input Power and Impedance Add Rated Voltage 2.83Vrms Operating Voltage 0.3~3.0Vrms Resonance Frequency 180 ±20%Hz Acceleration ≥5 Grms@10g load in middle at 2.83Vrms Add Rise Time, Break Time and Weight Add printing on the part Add Test Setup Update Reliability Test	2023.01.16