EXA 261808W-02 A

EXCITER

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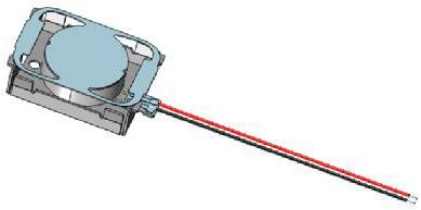
CONTENT



1. SPECIFICATIONS

Parameter	Unit	Conditions / Description	MIN	TYP	MAX
Rated Voltage	Vrms			1.0	
Operating Voltage	Vrms		0.3		1.2
Nominal Coil Resistance	Ω		6.8	8	9.2
Resonance Frequency	Hz		121.5	135	148.5
Acceleration	Grms	100g load at the center, 1Vrms, positive voltage to (+), U-yoke moves forward	1.6		
Contact				WIRE	
Packaging				TRAY	
Operating Temperature	°C		-40		+85
Storage Temperature	°C		-40		+95
Weight	g			6.8	

Remark:

This exciter is an electrodynamic actuator that can be used for haptics and acoustics.

Environmental conditions:

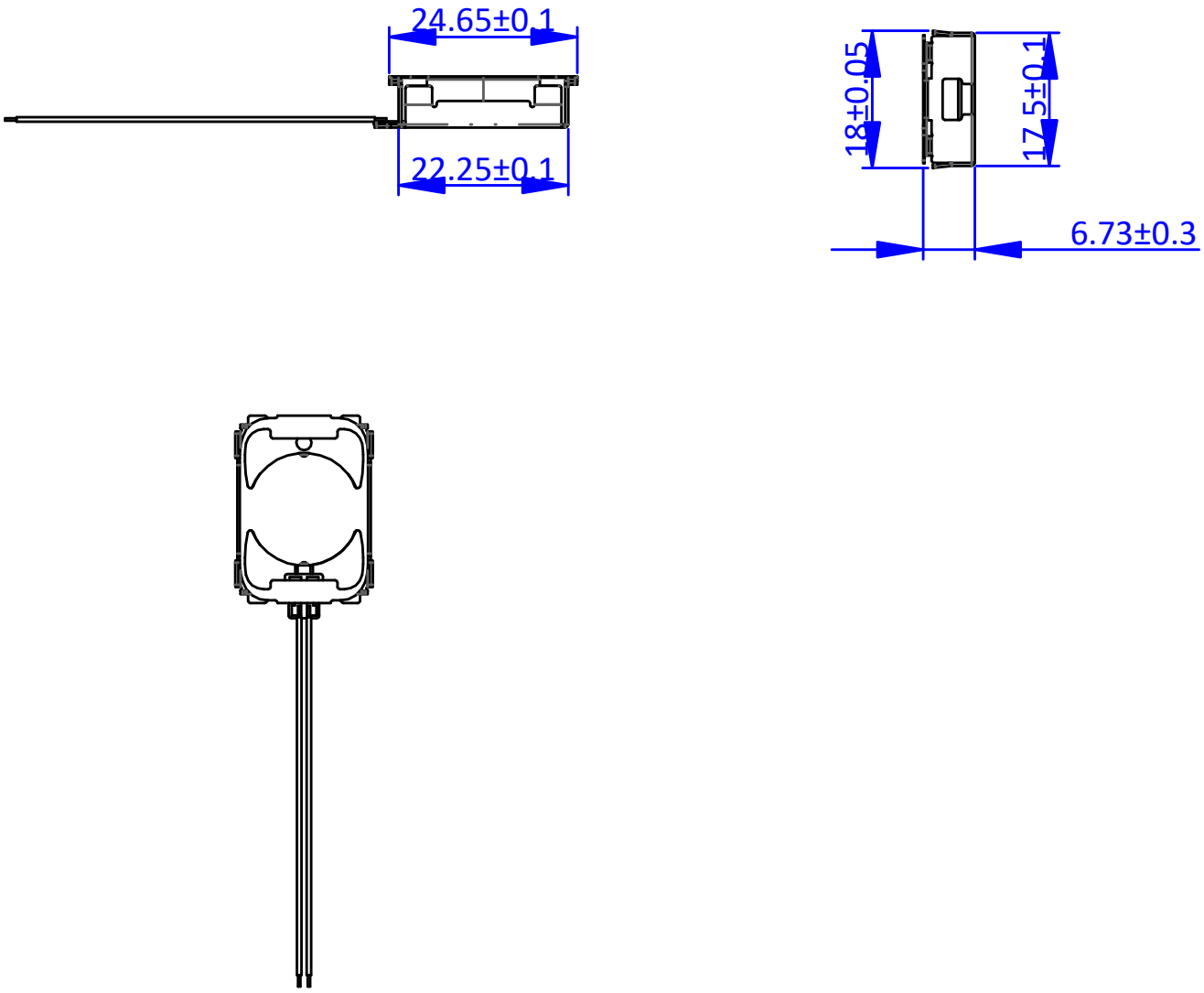
Standard conditions for inspection and measurement: Temperature +15 to +35°C, Humidity: 45 to 85% RH (no condensation of moisture)

When a judgment under standard conditions raises doubt, the following conditions apply:

Temperature +18 to +22°C, Humidity: 50 to 60% RH (no condensation of moisture

DESIGNED BY	Rabea Richter	DATE	2024.03.27	PART NO.	INDEX
RELEASED BY	Daniel Santella	DATE	2024.03.27	EXA 261808W-02 A	A
CHANGED BY	Rabea Richter	DATE	2024.07.26		
DRAWING NO.	453784707				

2. DRAWING



Unit: mm

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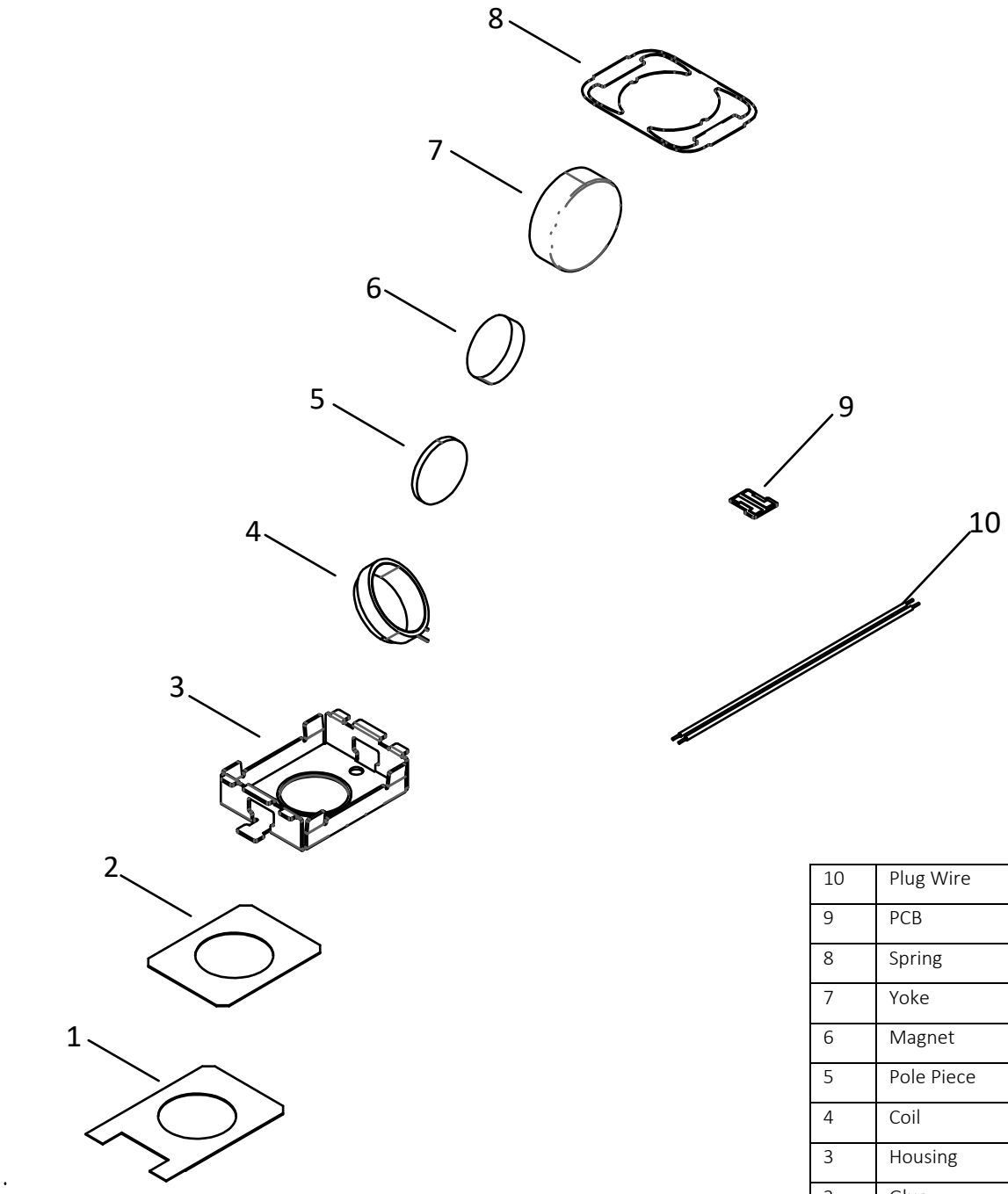
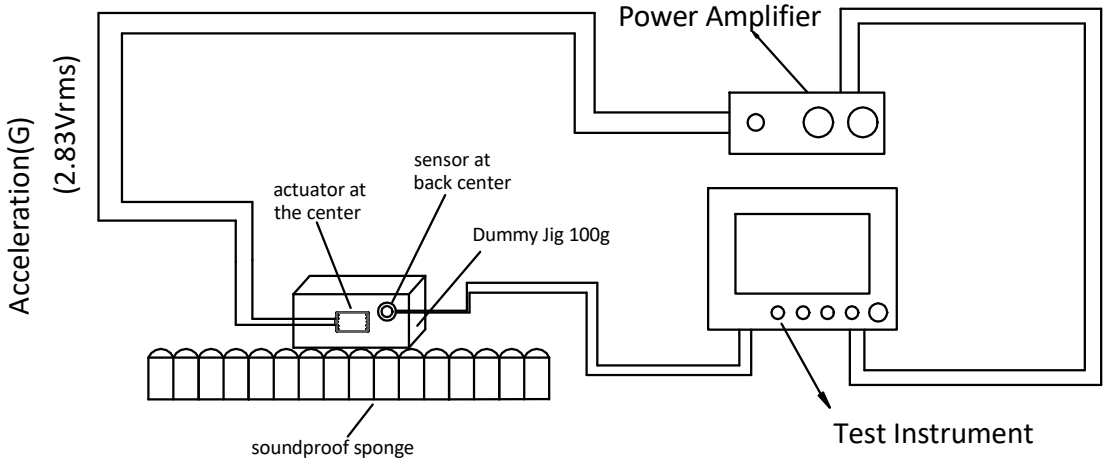
2.1 PART LIST



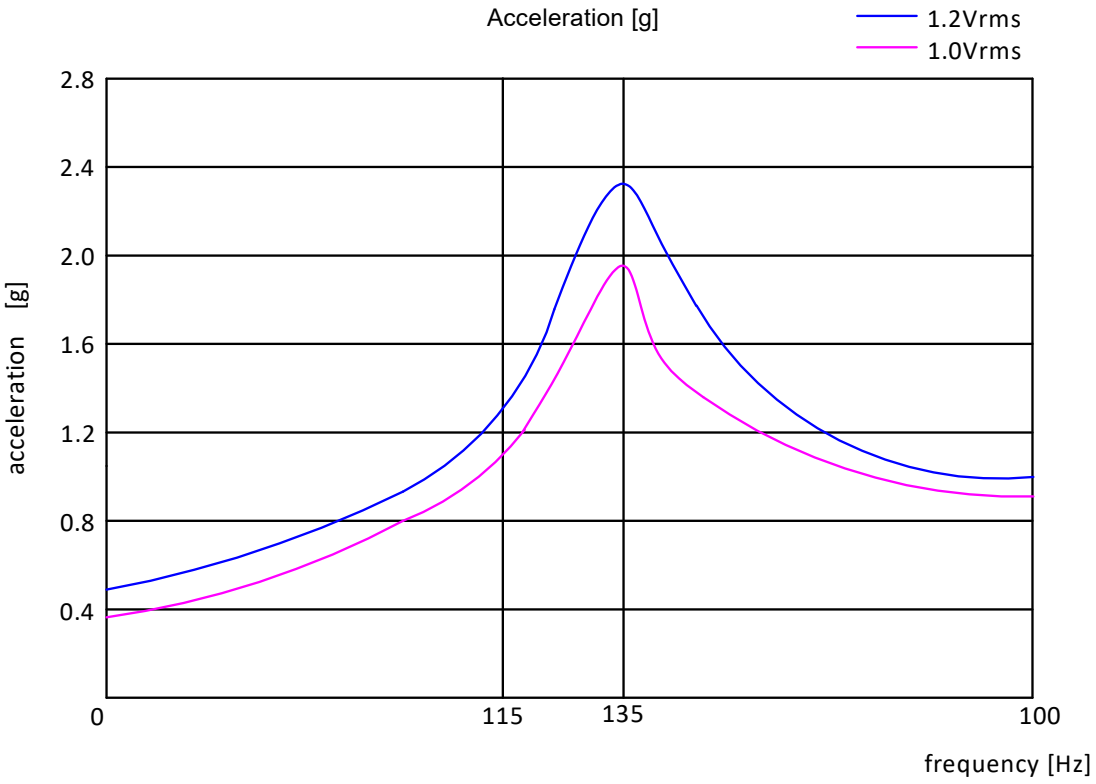
No.	Part Name	Material
10	Plug Wire	UL3302 AWG32#
9	PCB	FR-4
8	Spring	SUS
7	Yoke	SPCC
6	Magnet	NdFeB
5	Pole Piece	SPCC
4	Coil	AL+SHTW-SV
3	Housing	SUS
2	Glue	3M VHB
1	Release Liner	Craft Paper

3. TEST METHOD

3.1 TEST SETUP



3.2 ACCELERATION CHARACTERISTICS



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4. RELIABILITY TEST

4.1 Load Test

10g load on the center

Power (Nom)	1 Vrms, sustained vibration
Input signal	135Hz, sine wave
Duration	1000 hours

4.2 Vibration Test

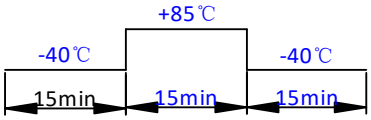
Input signal	10~2000~10Hz, 5g acceleration Vibration 20 minutes
Direction	12 cycles in each of three directions

4.3 High Temperature Test

Temperature	+85 ±2°C
Duration	1000 hours

4.4 Thermal Shock Test

Temperature	-40 ~+85°C
Cycles	300

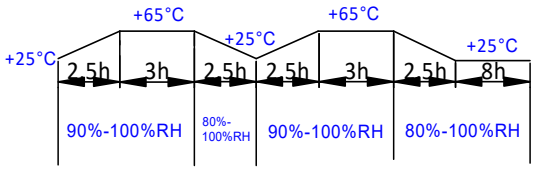


4.5 Damp Heat

Temperature	+85 ±2°C
Relative Humidity	85 ±2% RH
Duration	1000 hours

4.6 Temperature Cycle Test

Cycles 10



Performance requirements after test:
Acceleration: ≥1.6G at 100g load at the center, 1Vrms

4.6 Temperature Cycling Test

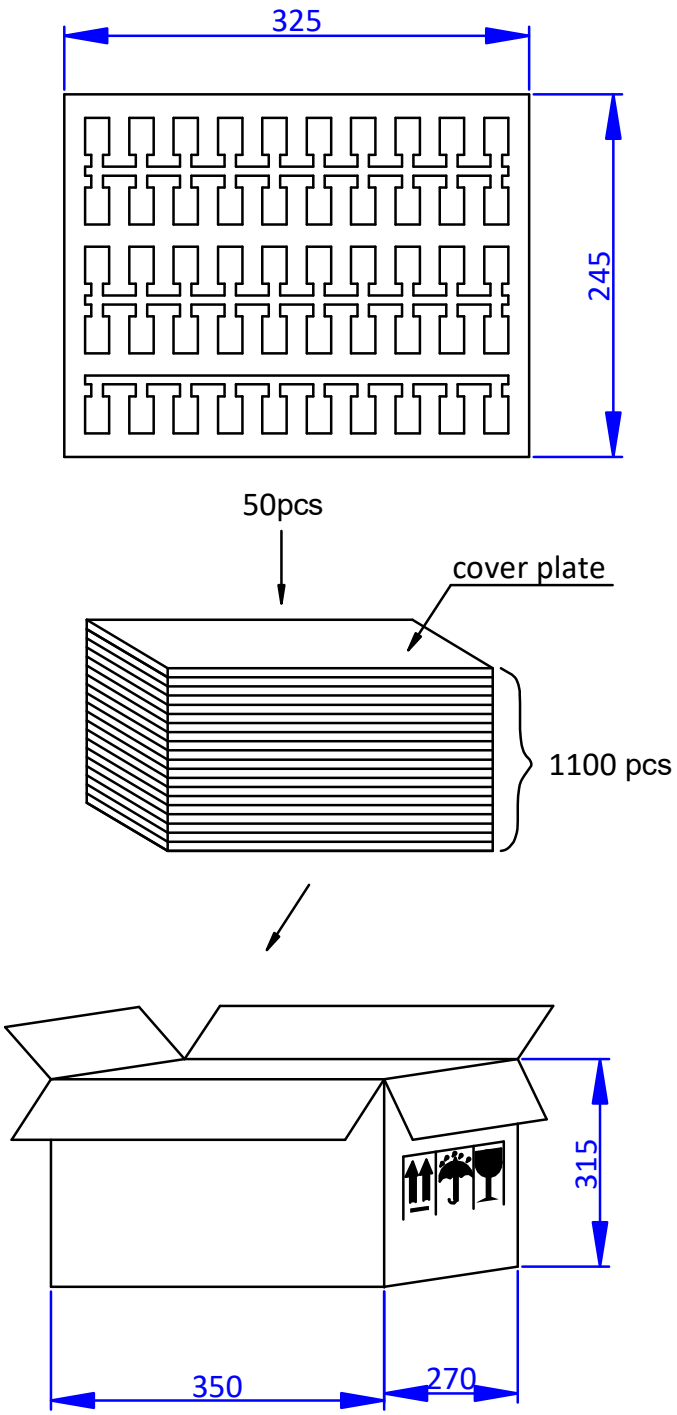
Temperature	-40 ±2°C
Cycles	1000
Condition	The rising and cooling rate is 10°C/minute, Each cycle point stays for 10minutes

Notice: Before the test, it should work normally for 1 hour. After the test, it should be placed at room temperature for at least 22 hours to test its performance.

5. PACKING

5.1 PACKING QUANTITY

50pcs per tray
22 trays per carton
1100pcs per carton in total
Carton size: 35x27x31.5cm



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6. NOTICE

6.1 The products mustn't be washed
6.2 Structural and component changes
The structure and components of the product can be modified to improve the quality of the product without changing the size and performance requirements
6.3 Storage Condition (Packaging)
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.
6.4 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 long time (more than six months), use them carefully, because the products may be degraded in the solderability and/or rusty. Please confirm solderability and characteristics for the products regularly.
6.5 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 storage under the poor condition.
6.6 Rated and Max input voltage
Rated input voltage
Rated input voltage is the maximum (limit) value which can be input to the component intentionally. If the actual input voltage to component keeps exceeding the Rated Input voltage, it will damage the component's acoustic performances and reliability. In the worst case, the component will get broken and emit no sound.
Max input voltage
Max input voltage is the maximum (limit) value for unexpected input voltage which is caused in the customer's circuit like surge voltage. If the actual input voltage to the component keeps exceeding the Maximum input voltage, it will break the component and cause no sound in a short time. Please note that component will have a risk to get broken if the unexpected input voltage continues.
The value of input voltage is set based on the sinusoidal voltage in the normal speaker use. If the special signal is input to component, the values of Rated and Max input voltage 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	
A0_pre		Initial preliminary version	2024.03.27
A1		General update, remove preliminary	2024.07.26