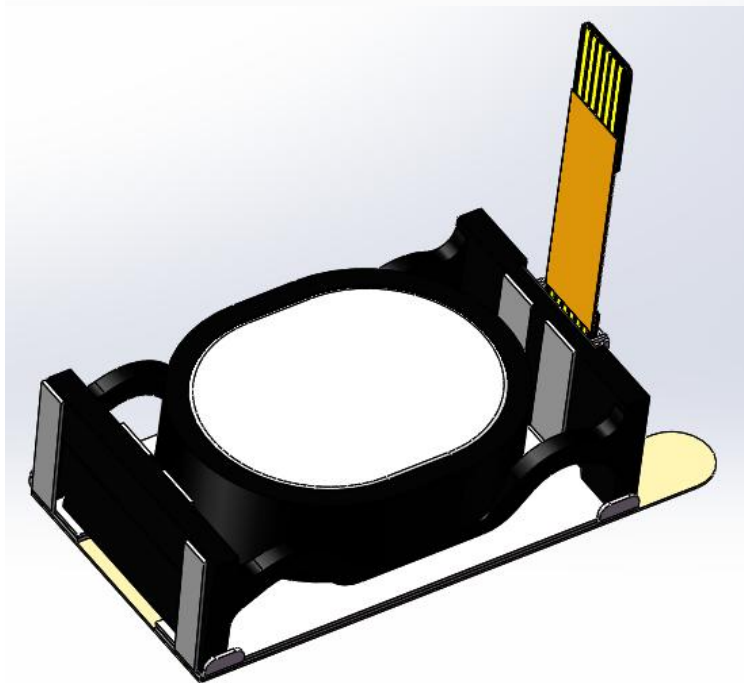
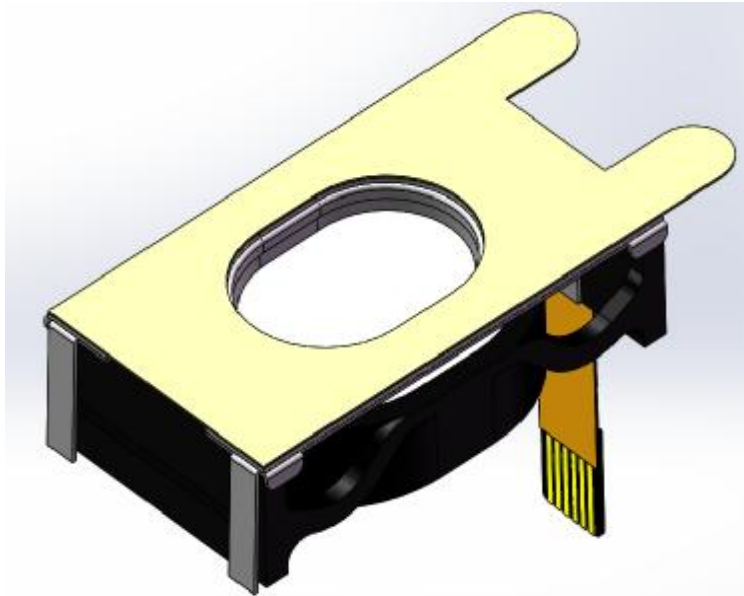


SPECIFICATION

BHS1324-11-08H6.5-01





SPECIFICATION FOR Haptic Actuator

TOTAL PAGE	12	www.bestargroups.com	RoHS
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Customer	Visteon	Model Name	BHS1324-11-08H6.5 -01
Customer P/N		Product No.	130149
Date	13 Sep 18	Issue No.	BS/TES01.1726A
Page	02 of 12	Issue Date	2018/09/13

Approval:

- 1.Characteristics
- 2.Drawing
- 3.Reliability Test
- 4.Packing
- 5.History Change Record

Drawn by	Checked by	Approved by	Customer approved

BESTAR HOLDING CO.,LTD

No.199 HuangHe West Road,New district,ChangZhou,JiangSu Province,P.R.China

Tel: +86 519 88222567 **Fax:** +86 519 88222551

E-mail:wu@be-star.com **<http://www.bestargroups.com>**

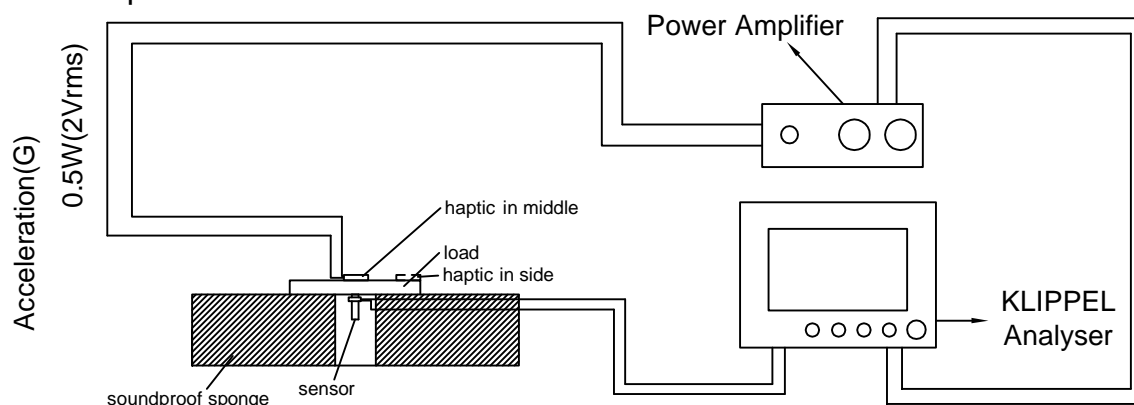
BHS1324-11-08H6.5 -01

1.Characteristics

1.1 Electrical and Mechanical Characteristics

No.	Item	Specification
1.	AC Impedance	8 Ω ± 15%(at 1KHz)
2.	Rated Input Power	2W
3.	Maximum Input Power	3W
4.	Resonance Frequency	180Hz ±20%
5.	Frequency Response	F0~ 10KHz
6.	Buzzes & Rattles	Must be normal at sine wave 2Vrms
7.	Acceleration(at 2.83Vrms)	≥9.0Grms@10g load in middle ; ≥7.0Grms@10g load in side
		≥6Grms@20g load in middle ; ≥5Grms@20g load in side
		≥3Grms@50g load in middle ; ≥3Grms@50g load in side
		≥1.5Grms@100g load in middle; ≥1.5Grms@100g load in side
9.	Leak sound(at 2.83Vrms)	≤40dB@ 100g load
10.	Polarity	Positive voltage to (+),Diaphragm moves forward
11.	Operating Temperature	-40~+ 85°C
12.	Storage Temperature	-40~+ 85°C

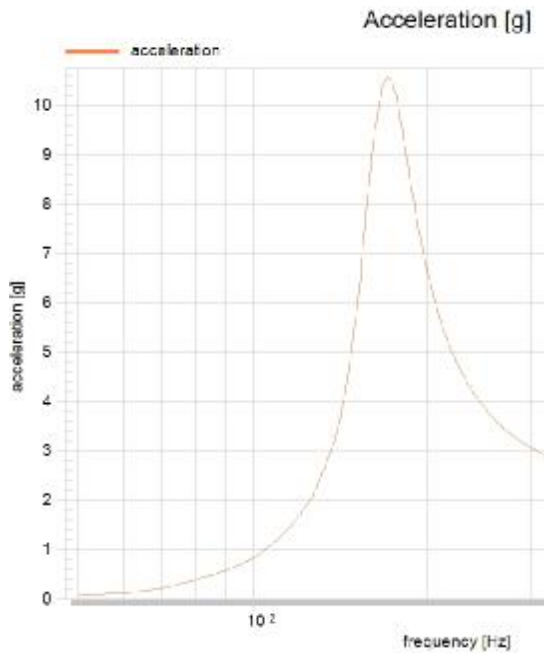
1.2 Haptic actuator Measurement Circuit



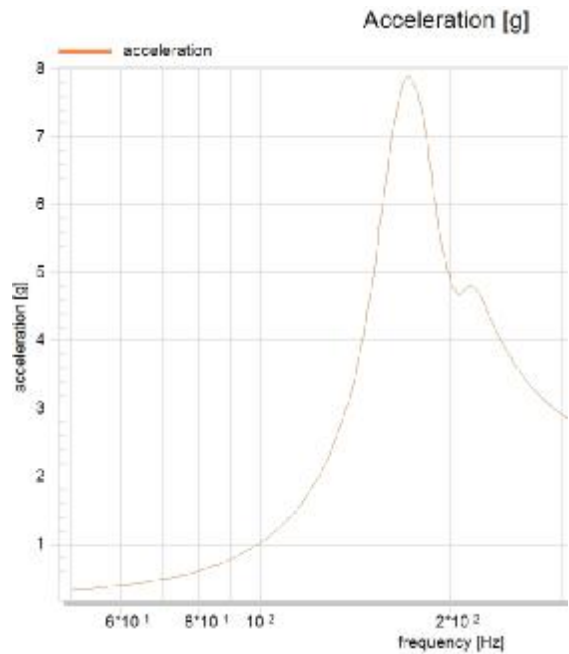
				Date:	2018/09/13	BHS1324-11-08H6.5 -01	
				Drawn by:	张林婷		
A	2018/09/13	张林婷		Checked by:	王平	Haptic actuator	
Rev.	Date	Drawn	Note	Approved by:	赵峥		
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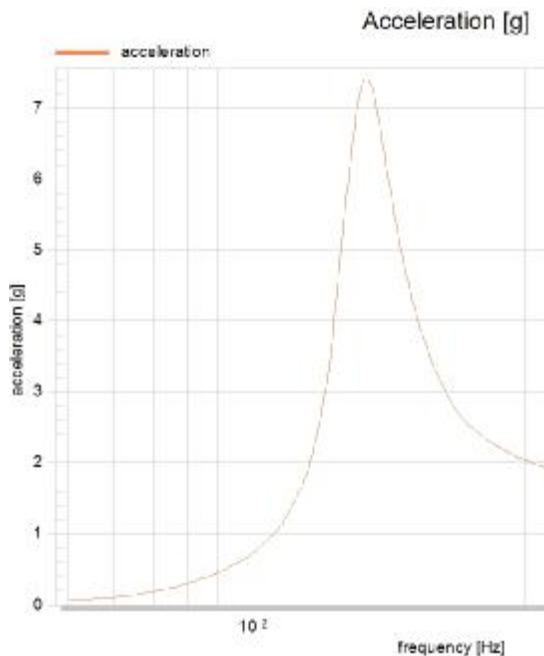
1.3 Acceleration characteristics



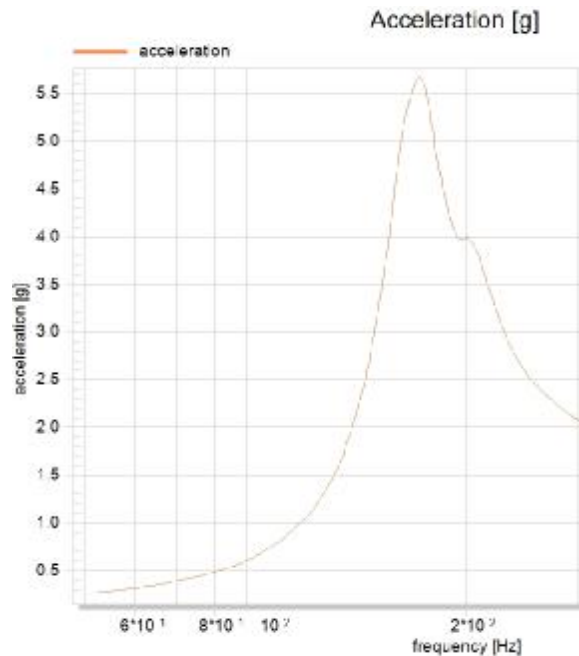
10g load in middle



10g load in side



20g load in middle

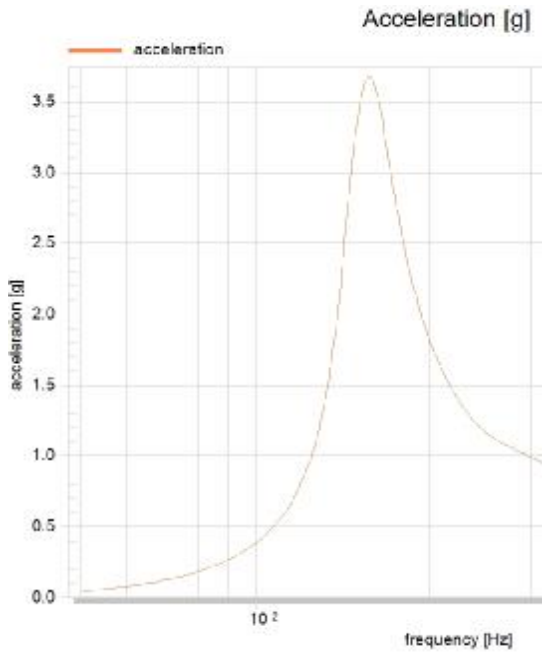


20g load in side

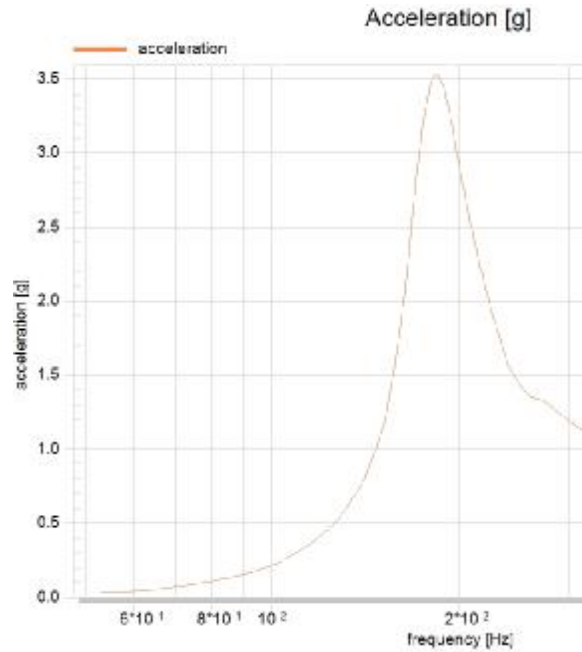
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				Drawn by:	张林婷		
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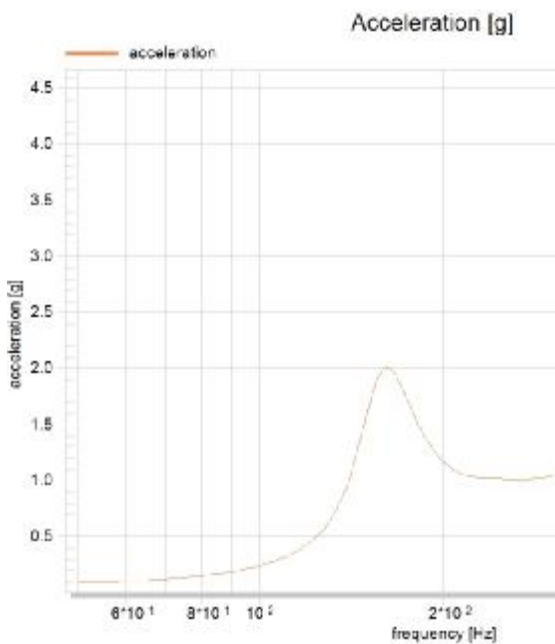
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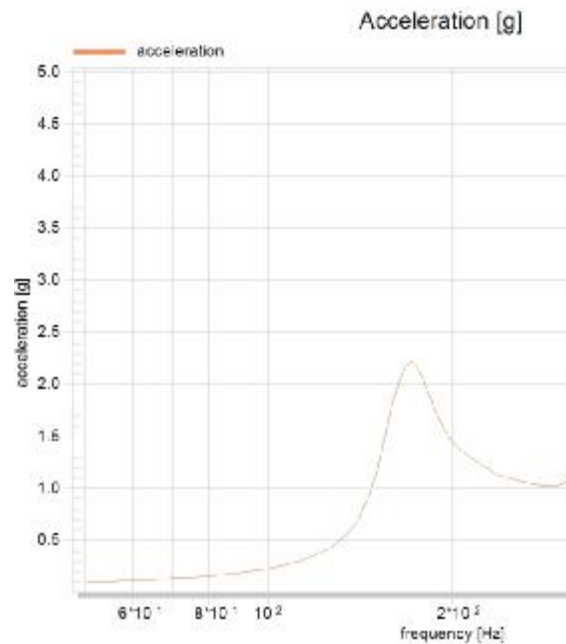
50g load in middle



50g load in side



100g load in middle



100g load in side

Date: 2018/09/13

BHS2616-11-08H6.5-01

Drawn by: 张林婷

Checked by: 王平

Approved by: 赵峥

Haptic actuator

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DRG NO: BS/TES01.1726A

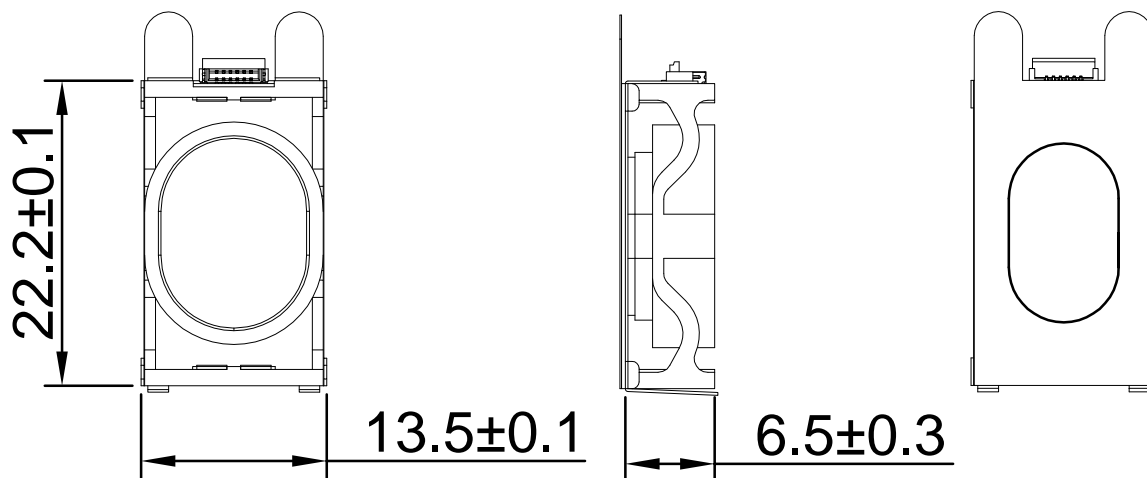
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2.Drawing

2.1 Product Dimensions



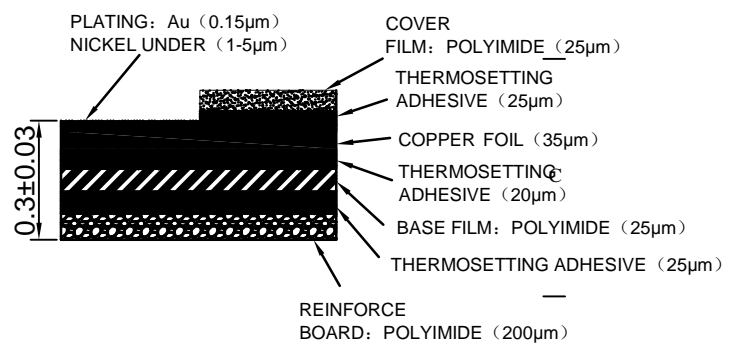
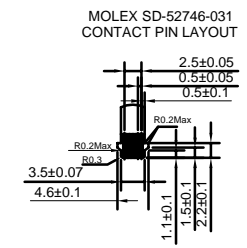
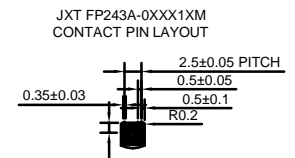
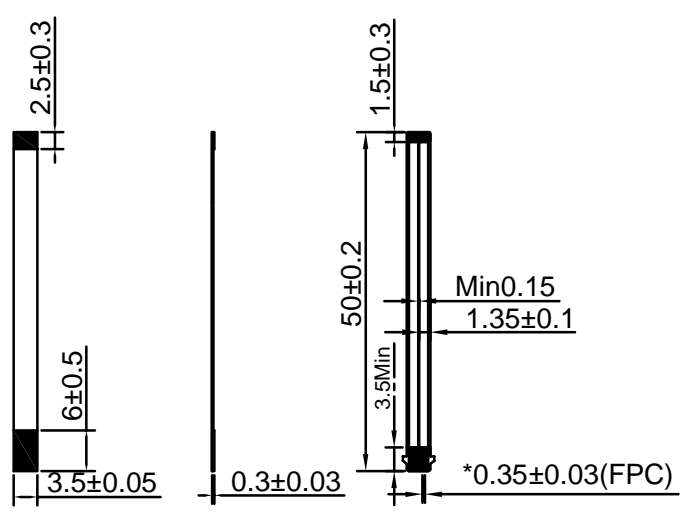
Unit:mm

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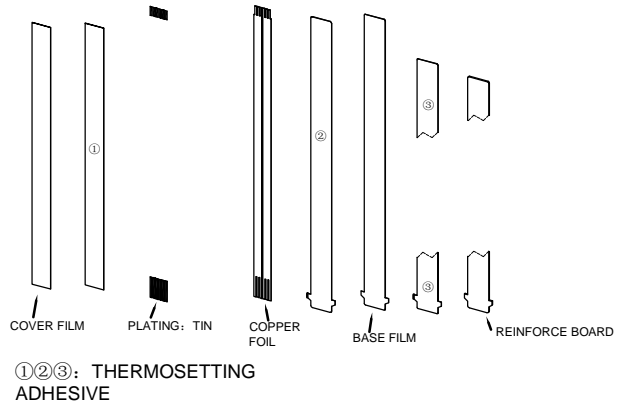
				Date:	2018/09/13	BHS1324-11-08H6.5 -01	
				Drawn by:	张林婷		
A	2018/09/13	张林婷		Checked by:	王平	Haptic actuator	
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2.2 FPC Dimensions



Conformance to IPC-6013 CLASS 3 TYPE 1 USE A

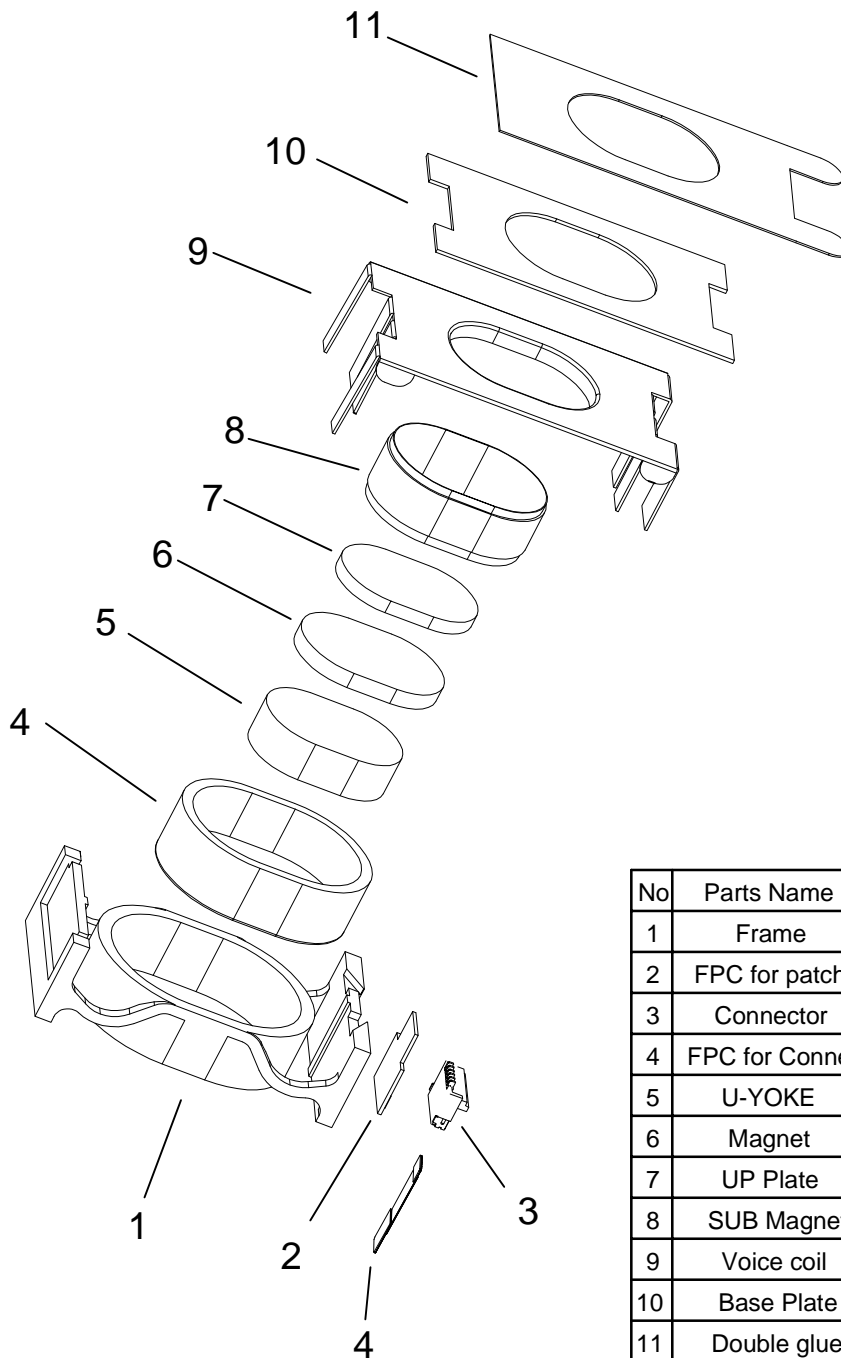


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2.3 Bill of material



No	Parts Name	QTY
1	Frame	1
2	FPC for patch	1
3	Connector	1
4	FPC for Connect	1
5	U-YOKE	1
6	Magnet	1
7	UP Plate	1
8	SUB Magnet	1
9	Voice coil	1
10	Base Plate	1
11	Double glue	1
12	Release Liner	1

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3. Reliability Test

3.1 Load Test

Power (Nom) 1W, 0.5s ON/0.5s OFF
 Input signal 180Hz sine wave
 Cycles 2200000

3.2 High Temperature load Test

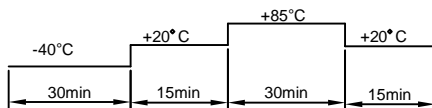
Power 1W, 0.5s ON/0.5s OFF
 Temperature +85±2°C
 Input signal 180Hz sine wave
 Duration 720hrs

3.3 Low Temperature load Test

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

3.4 Temperature cycles Test

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

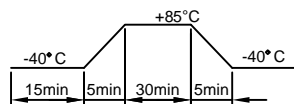


3.5 Damp Heat

Power 1W, 0.5s ON/0.5s OFF
 Temperature 65±2°C
 Relative Humidity 90%-95%RH
 Input signal 180Hz sine wave
 Duration 720hrs

3.6 Thermal shock

Temperature -40~85°C
 Cycles 1000



3.7 Vibration Test

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

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3.Reliability Test

3.8 Drop test

Height	70cm
(to 10mm thickness woodenboard)	
Direction	3

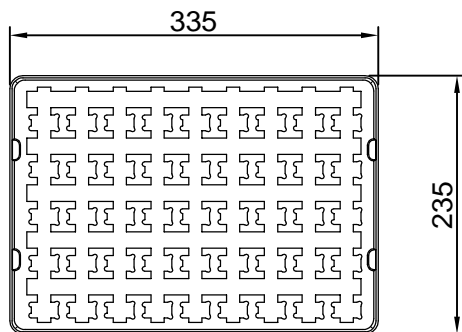
After the test,all electronic and acoustic characteristic should be satisfied with the specification. Acceleration: Deviation is of $\pm 25\%$ of initial value.

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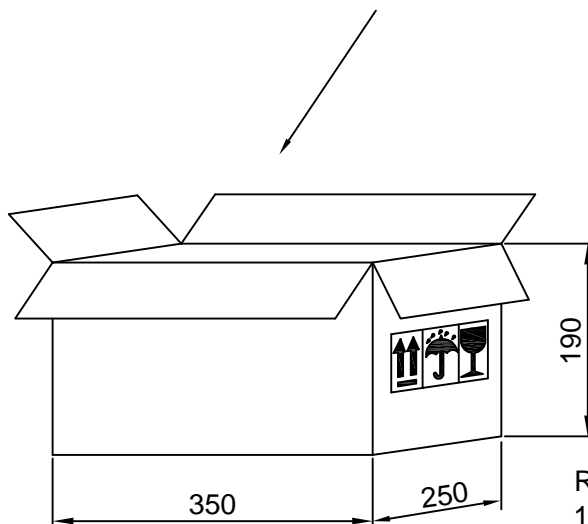
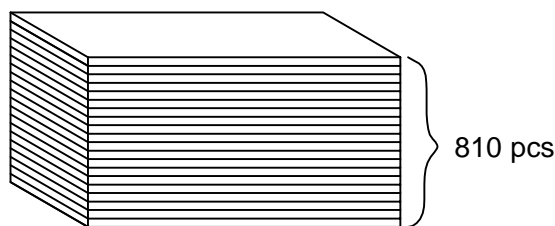
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				Drawn by:	张林婷		
A	2018/09/13	张林婷		Checked by:	王 平	Haptic actuator	
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4.Packing



45pcs



Remark:
 19 layers per box
 The first layer is used as a cover plate
 45 pcs per layer
 $18 \times 45 = 810$ pcs per box
 Size: 35×25×19(cm)

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5. History Change Record

version No.	Change Items		Date	Drawn	Approved
	Before	After			
A			2018/09/13	张林婷	赵 峥

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Rev.	Date	Drawn	Note	Approved by:	赵 峥
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