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	Revision No.	1.2
KPB4001-Q8059	Drawing No.	KFC8059

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Rev.	DATE	PAGE	DESCRIPTION	SIGN
1.2	2018.02.02	1/8, 8/8	Applied To:3049680 A01S->3049680 03S	
1.1	2017.06.05	7/8	Change wire L95->L120 TUBE L75->100	
1.0	2016.04.26		Primary	
Revision 履历表				

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1. Scop

This specification is applied to the dynamic speaker which is used all of the electrical acoustic product.

- compact, rich sound
- applications: mobile phone, PDA, notebook computer, etc. ...

2. General

- 2.1 Out-Diameter:40mm
- 2.2 Height: 14mm
- 2.3 Weight:32g
- 2.4 Operating Temperature range:
-30~+85℃ without loss of function
- 2.5 Store Temperature range:
-40~+90℃ without loss of function

3. Electrical and Acoustic Characteristics

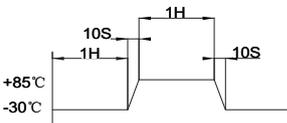
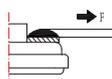
Test condition : 15 ~ 35 °C, 25% ~ 85% RH, 860~1060 mbar

	Item	Specification
3.1	Impedance	64Ω±15%(1Vrms at 3000Hz)
3.2	Sound Pressure Level	94dB±3dB at (0.25w / 0.3m Avg. at 1.5k,1.8k,2.0k,2.5kHz)
3.3	Resonance Frequency	1500Hz±20%
3.4	Frequency Range	F ₀ ~4.5KHz
3.5	Input Power	Rated 0.25W/Max. 0.5W (White noise for 30 minute)
3.6	Distortion	<5% Max. at 2kHz/4.0Vrms
3.7	Buzz and Rattle	Should not be audible buzzes, rattles when the 4.0V sine wave signal swept at frequency range.
3.8	Polarity	When supplied plus D.C. voltage to (+) terminal, the cone diaphragm must move to forward.

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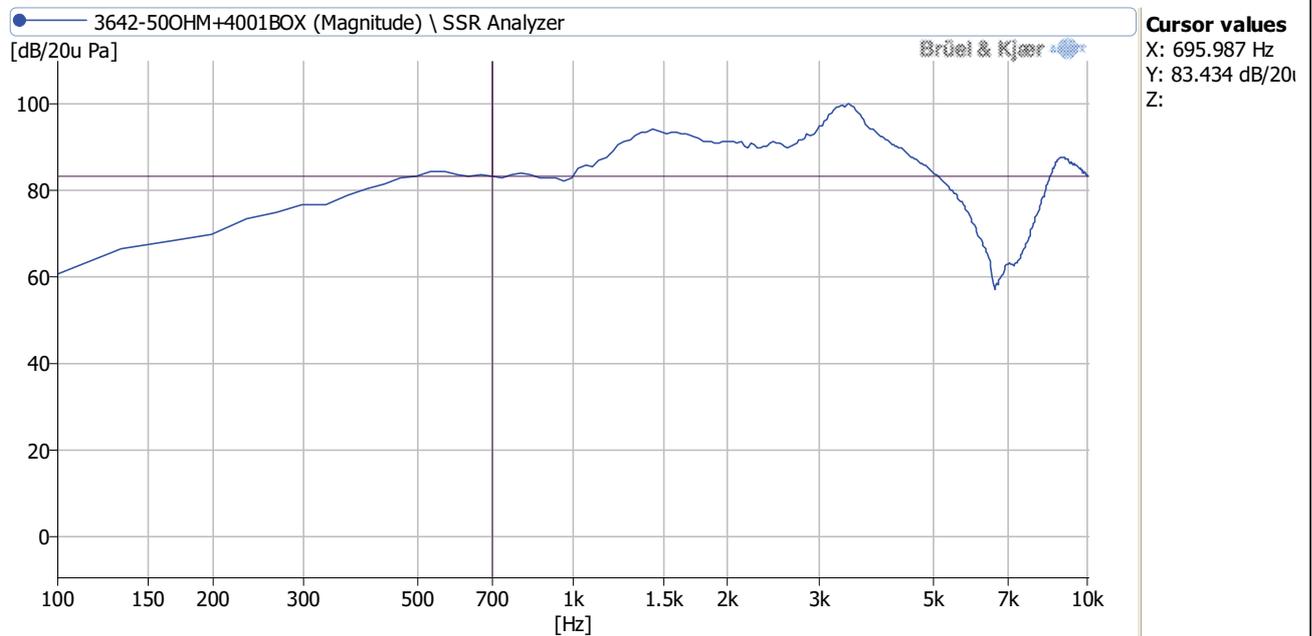
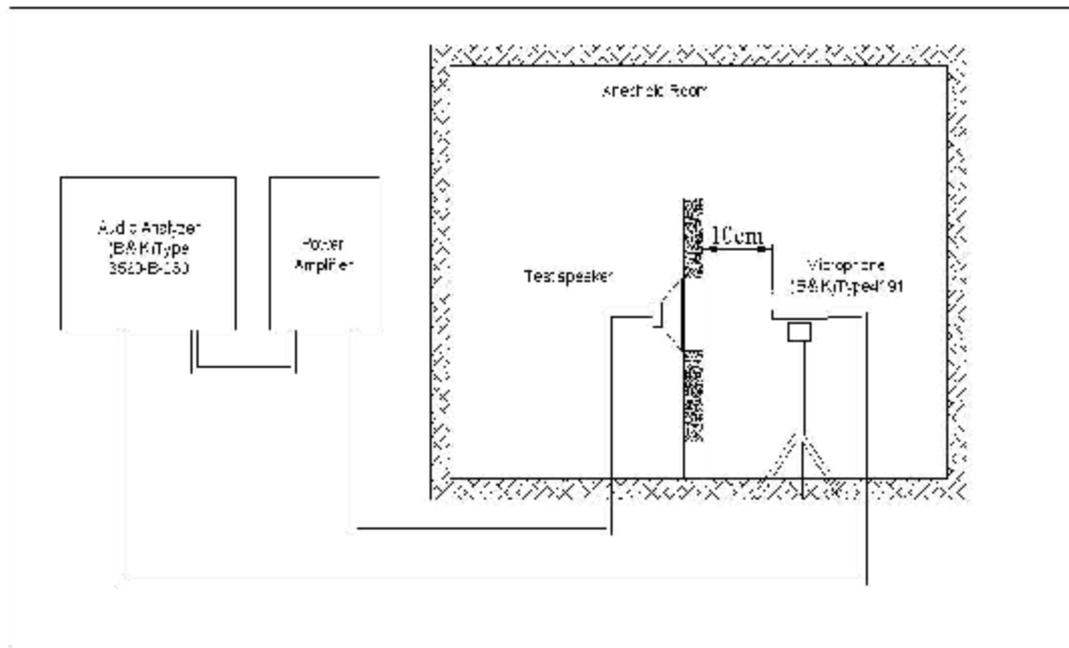
4. Reliability Test

After test(1~7item), the speaker S.P.L . difference shall be within $\pm 3\text{dB}$, and the appearance not exist any change to be harmful to normal operation(e.g. cracks,rusts,damages and especially distortion).

	Item	Specification
4.1	High Temperature Test	After being placed in a chamber with $+90\pm 3\text{ }^\circ\text{C}$ for 96 hours and then being placed in natural condition for 1 hour, speaker shall be measured.
4.2	Low Temperature Test	After being placed in a chamber with $-40\pm 3\text{ }^\circ\text{C}$ for 96 hours and then being placed in natural condition for 1 hour, speaker shall be measured.
4.3	Humidity Test	After being placed in a chamber with 95%R.H. at $+63\pm 3\text{ }^\circ\text{C}$ for 96 hours and then being placed in natural condition for 1 hour, speaker shall be measured.
4.4	ON/OFF Operation Endurance Test	Applying power 0.25W(20Hz~20kHz, sine wave frequency scan signal, scan speed 8ms), carry out operation patterns for 250 hours on/off operation, every on/off circle taks 4 second, 2s on and 2s off.
4.5	Thermal Shock Test	<p>After being placed in a chamber at $+85\text{ }^\circ\text{C}$ for 1 hour, then speaker shall be placed in a chamber at $-30\text{ }^\circ\text{C}$ for 1 hour(1 cycle is the below diagram).</p> <p>After 4 above cycles, speaker shall be measured after being placed in natural condition for 10 Sec..</p> 
4.6	Vibration Test	Put the sampels in test equipment, vibrate at speed 4.4G(43.1m/s ²) , vibration of amplitude 1.5mm ,33 Hz in X Y Z directions for 4 hours. speaker shall be measured.
4.7	Drop Test	The speaker when mounted in the jig which weight 85g~100g, shall with stand 15 times random drops from a height of 1.5 meter to a concrete floor faced with 5mm thick hard wood board. and be nothing mechanical damage.
4.8	Load test	After being applied loading white noise with input power 0.25W (4Vrms.) for 96 hours, then placed in natural condition for 1 hour, speaker shall be measured.
4.9	Insulation test	When they are measured with DC 100V the insulation resistance between v.c. terminal and frame must be more than 1 M Ω
4.10	High temperature operation Endurance Test	Apply power 0.5W(20Hz~20kHz, sine wave frequency scan signal, scan speed 8ms), temperature $65\pm 3\text{ }^\circ\text{C}$, carry out operation patterns for 48 hours.
4.11	Low temperature operation Endurance Test	Apply power 0.5W(20Hz~20kHz, sine wave frequency scan signal, scan speed 8ms), temperature $-30\pm 3\text{ }^\circ\text{C}$, carry out operation patterns for 48 hours.
4.12	Pull A Terminal Test	<p>Speaker shall continue to operate after test of a 10N F direction force for 30 seconds.</p> 

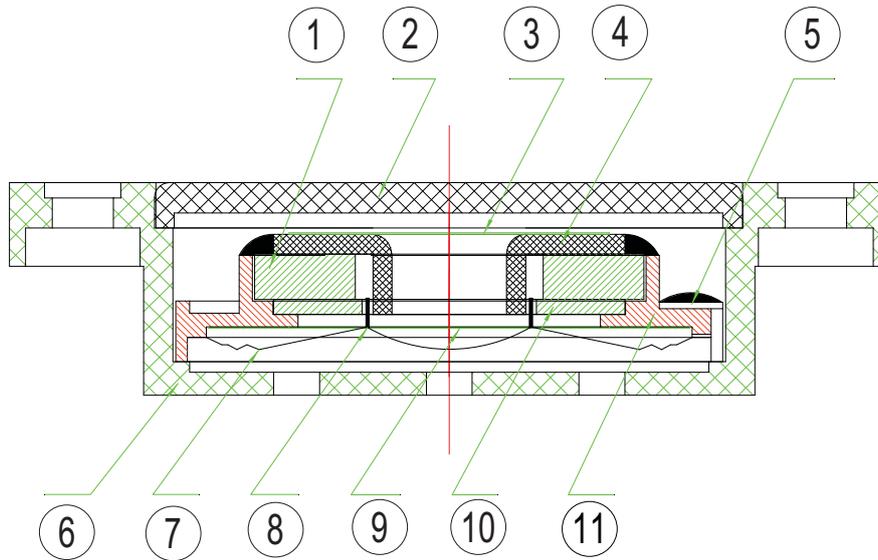
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5. Measurement Block Diagram & Response curve



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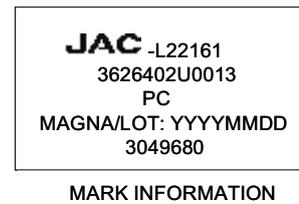
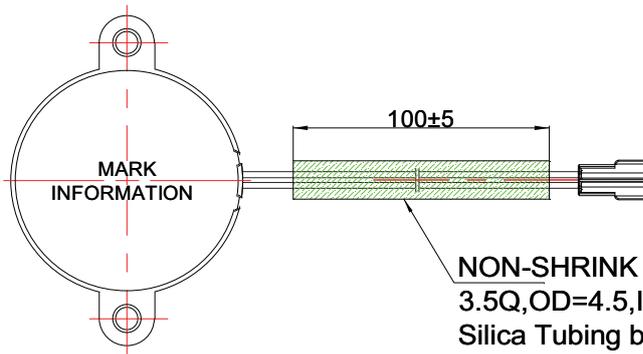
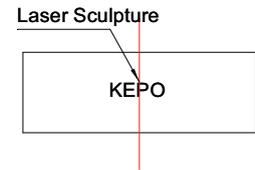
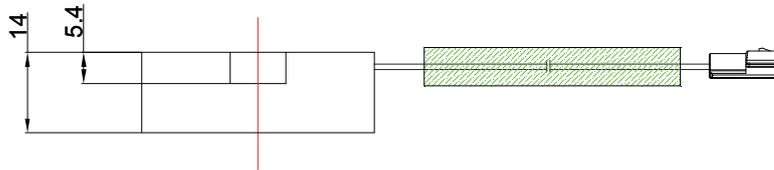
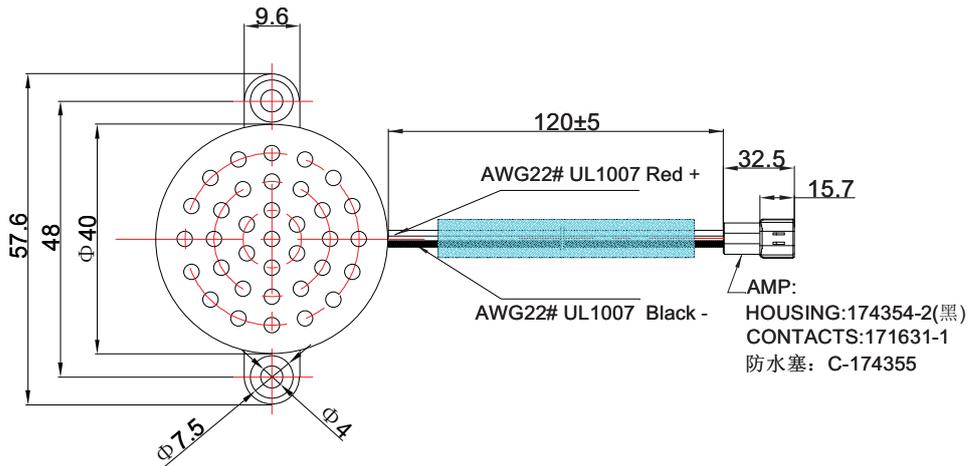
6. Structure



11	Frame	1	PBT	
10	Plate	1	SPCC	
9	Screen2	1	2B	
8	Voice Coil	1	Copper	
7	Diaphragm	1	PEI	
6	BOX-773 frontCover	1	PC	
5	Terminal	1	Epoxy PCB(FR-4)	
4	Yoke	1	SPCC	
3	Screen1	1	2B	
2	BOX-774 rearCover	1	PC	
1	Magnet	1	Y30	
No.	Part Name	Q'ty	Material	Remarks

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7. Dimensions



FIRST ANGLE PROJECTION: UNIT : mm

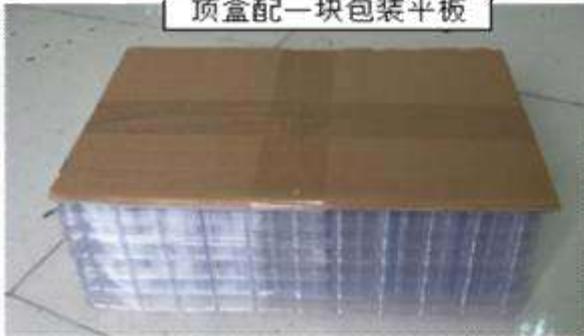
Tolerance: ± 0.5 mm

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8. Packing



1盒装28个喇叭



顶盒配一块包装平板



每箱装28x11=308PCS



标贴范本，此标贴贴于外箱正唛右上方