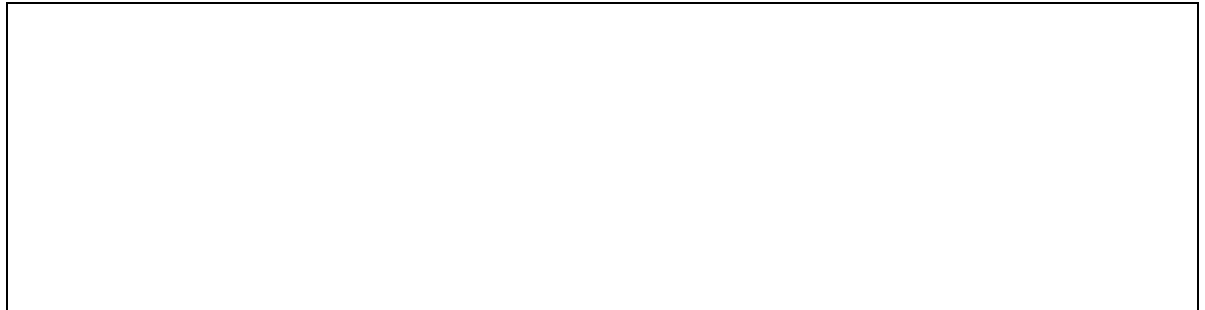


SPECIFICATION

受 控

Customer: 合肥晟泰克
Applied To:
Product Name: SPEAKER BOX
Model Name: KPB4201SP1R90-Q7994
Drawing No.: KFC7994

Compliance with ROHS (本品符合 ROHS 指令)



Signature of KEPO

Issued by	Checked by	Approved by	Date
王真	忻容荣		



宁波凯普电子有限公司

Ningbo Kepo Electronics Co., Ltd.

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Email: Sales@chinaacoustic.com

<http://www.chinaacoustic.com>

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1. Scope
2. General
3. Electrical and Acoustic Characteristics.
4. Reliability Test
5. Measurement Block Diagram & Response curve
6. Structure
7. Dimensions
8. Packing

Rev.	DATE	PAGE	DESCRIPTION	SIGN
1.2	2017.05.15		根据客户图档修改及增加侧唛标贴	
1.1	2017.01.09		Add date code	
1.0	2016.07.27		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:42mm
- 2.2 Height: 13mm
- 2.3 Weight:16.5g
- 2.4 Operating Temperature range:
-40~+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 ℃ , 25% ~ 85% RH, 860~1060 mbar

	Item	Specification			
3.1	Impedance	100Ω±15%(1Vrms at 3000Hz)			
3.2	Coil resistance	90Ω±7%			
3.3	Sound Pressure Level	<table border="1" style="width: 100%;"> <tr> <td style="width: 50%;">≥60dB at 0.8KHz</td> <td rowspan="2" style="width: 50%;">0.25W(7.0Vp-p)/0.5m baffle board(IEC) square wave</td> </tr> <tr> <td>≥70dB at 1.2KHz</td> </tr> </table>	≥60dB at 0.8KHz	0.25W(7.0Vp-p)/0.5m baffle board(IEC) square wave	≥70dB at 1.2KHz
≥60dB at 0.8KHz	0.25W(7.0Vp-p)/0.5m baffle board(IEC) square wave				
≥70dB at 1.2KHz					
3.4	Resonance Frequency	1100Hz±20%			
3.5	Frequency Range	1000Hz ~5.0KHz			
3.6	Input Power	Rated 0.25W/Max. 0.5W			
3.7	Distortion	<table border="1" style="width: 100%;"> <tr> <td style="width: 50%;">$<15\%$ at 0.8kHzs</td> <td rowspan="2" style="width: 50%;">$0.1w(3.16V)$sine wave</td> </tr> <tr> <td>$<5\%$ at 1.2kHz</td> </tr> </table>	$<15\%$ at 0.8kHzs	$0.1w(3.16V)$ sine wave	$<5\%$ at 1.2kHz
$<15\%$ at 0.8kHzs	$0.1w(3.16V)$ sine wave				
$<5\%$ at 1.2kHz					
3.8	Buzz and Rattle	Should not be audible buzzes, rattles when the 5.0V sine wave signal swept at frequency range.(450Hz~5KHz)			
3.9	Polarity	When supplied plus D.C. voltage to (+) terminal, the cone diaphragm must move to forward.			

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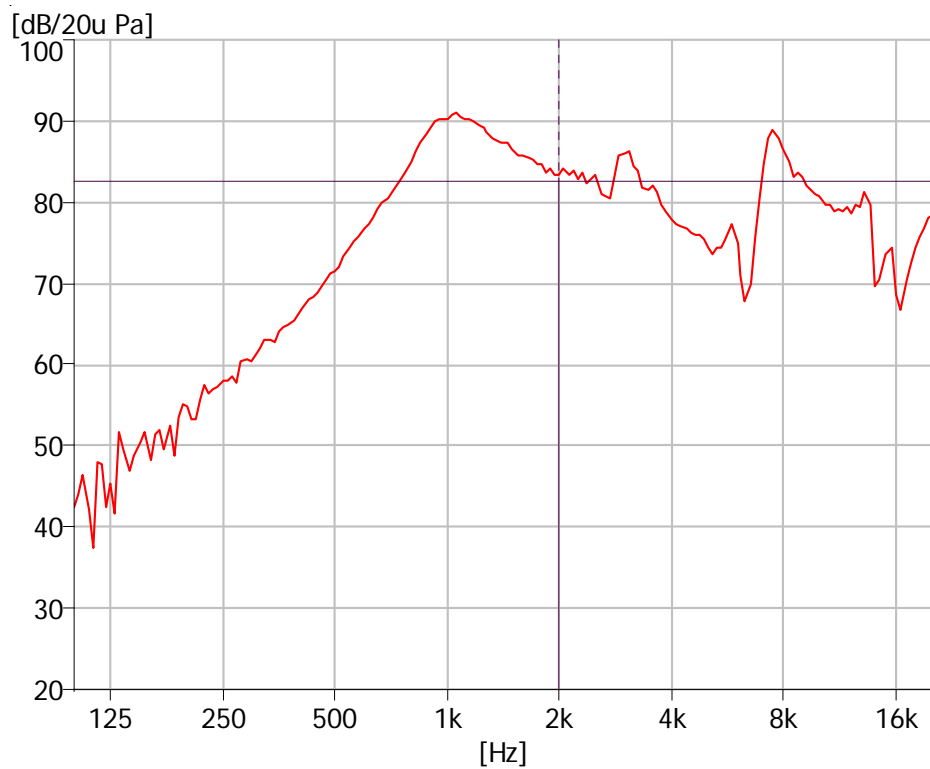
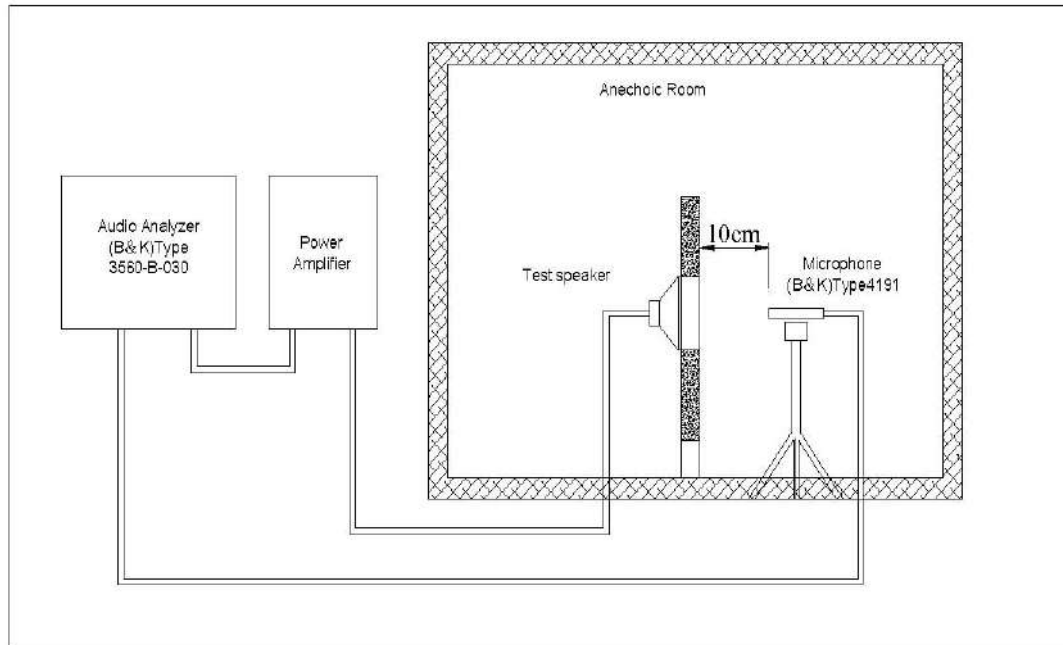
4. Reliability Test

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 3 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 3 hour, speaker shall be measured.
4.3	Humidity Test	After being placed in a chamber with 95%R.H. at $+40\pm 3\text{ }^{\circ}\text{C}$ for 96 hours and then being placed in natural condition for 1 hour, speaker shall be measured.
4.4	Thermal Shock Test	After being placed in a chamber at $+90\text{ }^{\circ}\text{C}$ for 1 hour, then speaker shall be placed in a chamber at -40°C for 1 hour(1 cycle). After 5 above cycles, speaker shall be measured after being placed in natural condition for 3 hours
4.5	Vibration Test	10~55~10Hz sin-wave sweep 15min.5G(constant) X,Y,Z 3 direction.2 hours each,total 6hours
4.6	Drop Test	Free drop from 75cm height to a board of 20mm thick,tatal 10 times
4.7	Load test	After being applied loading white noise with input power 0.25W (5Vrms.) for 96 hours, then placed in natural condition for 1 hour, speaker shall be measured.
4.8	Max Power test	Max power 1 min on -2 min off 10 cycles

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5. Measurement Block Diagram & Response curve



Cursor values

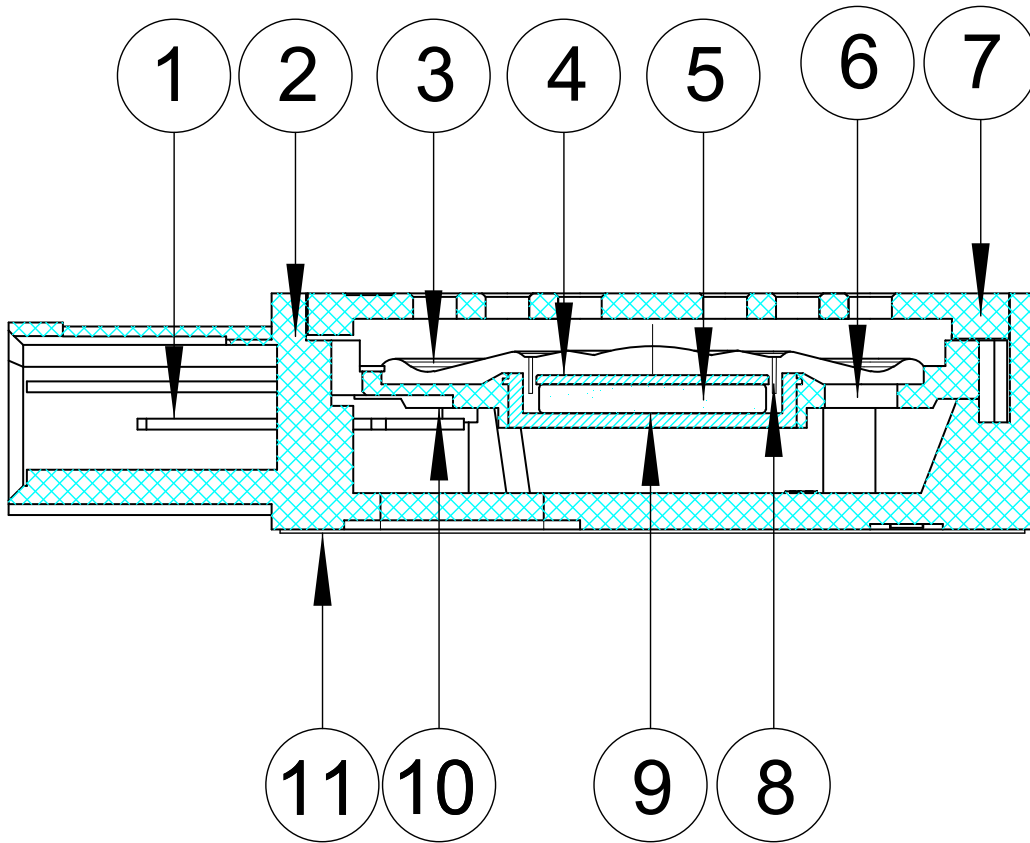
X: 2.000k Hz

Y: 83.286 dB/20u Pa

Z:

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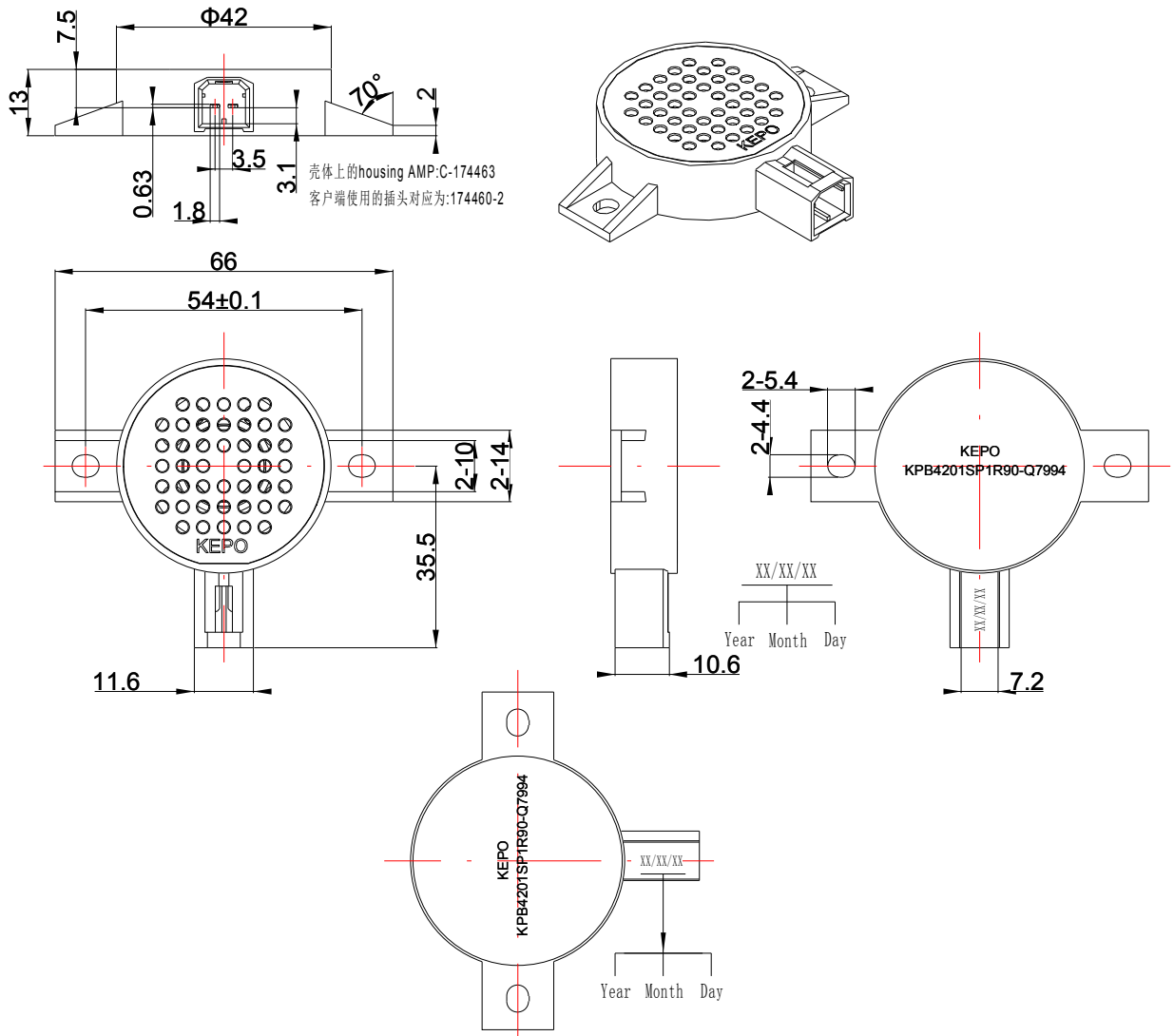
6. Structure



11	Housing	1	PPE+PS-GF20 Black	
10	PCB	1	FR-4	
9	YOKE	1	SPCC	
8	Voice Coil	1	Copper	
7	Protector	1	PPE+PS-GF20 Black	
6	Frame	1	PPE+PS-GF20 Black	
5	Magnet	1	Nd-Fe-B	
4	Plate	1	SPCC	
3	Diaphragm	1	PEI	
2	Protector	1	PPE+PS-GF20 Black	
1	Connector Pin	2	QSn6.5-0.1 Y2 Ep.NI0.002 Sn0.007	
No.	Part Name	Q'ty	Material	Remarks

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8. Dimensions 尺寸

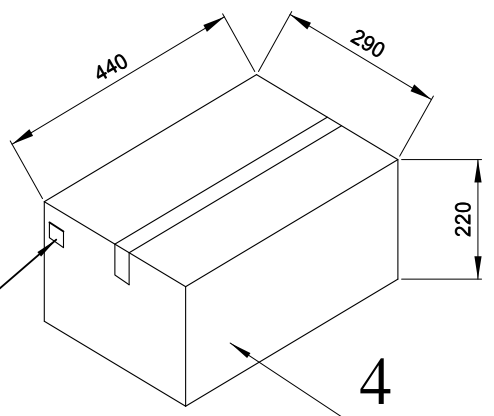
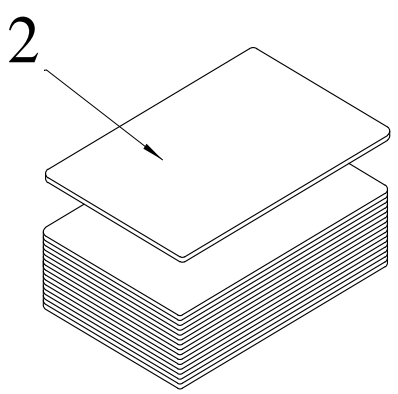
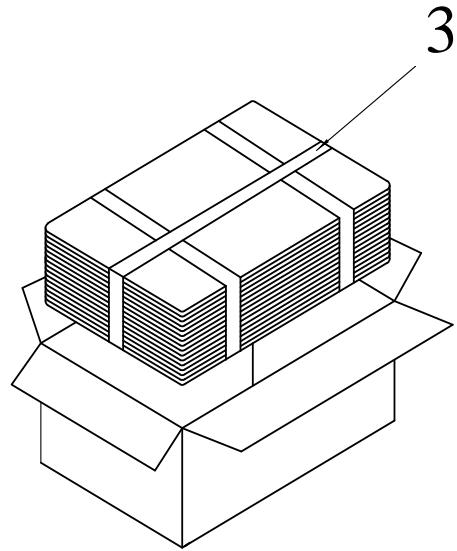
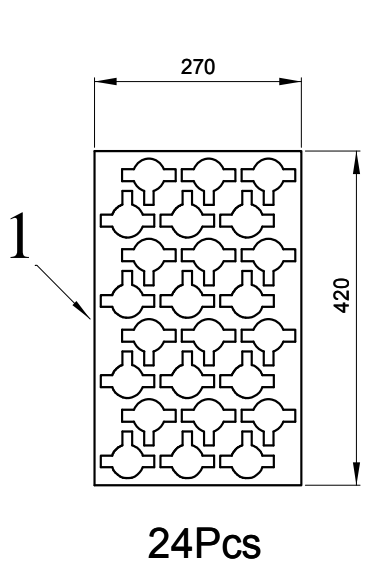


未注尺寸公差: $\pm 0.3\text{mm}$, 未注角度公差: $\pm 1^\circ$

FIRST ANGLE PROJECTION: UNIT : mm

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8. Packing



侧唛标贴
贴于两侧侧唛左上角

物料名称: 喇叭
 供应商编码: B133002
 物料编码: BCD290001
 规格型号: KPB4201SP1R90-Q7994
 批次: 170515001
 数量: 240PCS
 生产批号: 20190330
 供应商名称: 宁波凯普电子有限公司

QTY:240Pcs
425 x275 x220