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	Revision No.	1.0
Model No. : KPB3101-6866	Drawing No.	KFC6866

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1. Scope

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 : 31 mm

2.2 Height : 14.8 mm

2.3 Weight : 8.3 g

2.4 Operating Temperature range:

-40~+105℃ without loss of function

2.5 Store Temperature range:

-40~+120℃ without loss of function

3. Electrical and Acoustic Characteristics.

Test condition : 15 ~ 35 ℃, 25% ~ 85% RH, 860~1060 hPa

No	Items	Specification
1	Impedance	45 Ω ± 15% (1Vrms at 1KHz)
2	Sound Pressure Level	≥90dB (0.4W/15.24CM at 440Hz-2kHz)
		Typ 92dB at 440Hz
		Typ 92dB at 750Hz
		Typ 91dB at 1kHz
3	Resonance Frequency	500 Hz ± 20%
4	Frequency Range	Fo ~10KHz
5	Input Power	Rated 0.4 W / Max. 0.5 W for 1 min.
6	Distortion	10% Max. at 440-2kHz/4.24Vrms
7	Buzz and Rattle	Should not be audible buzzes,rattles when the 4.24V sine wave signal swept at frequency range.
8	Electrical polarity	When "+" votag is appllied to "+" terminal, the diaphragm should move to forward.

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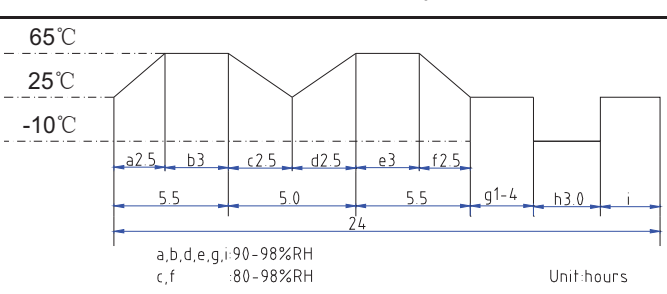
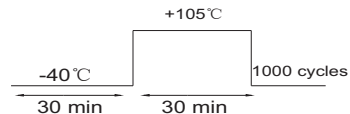
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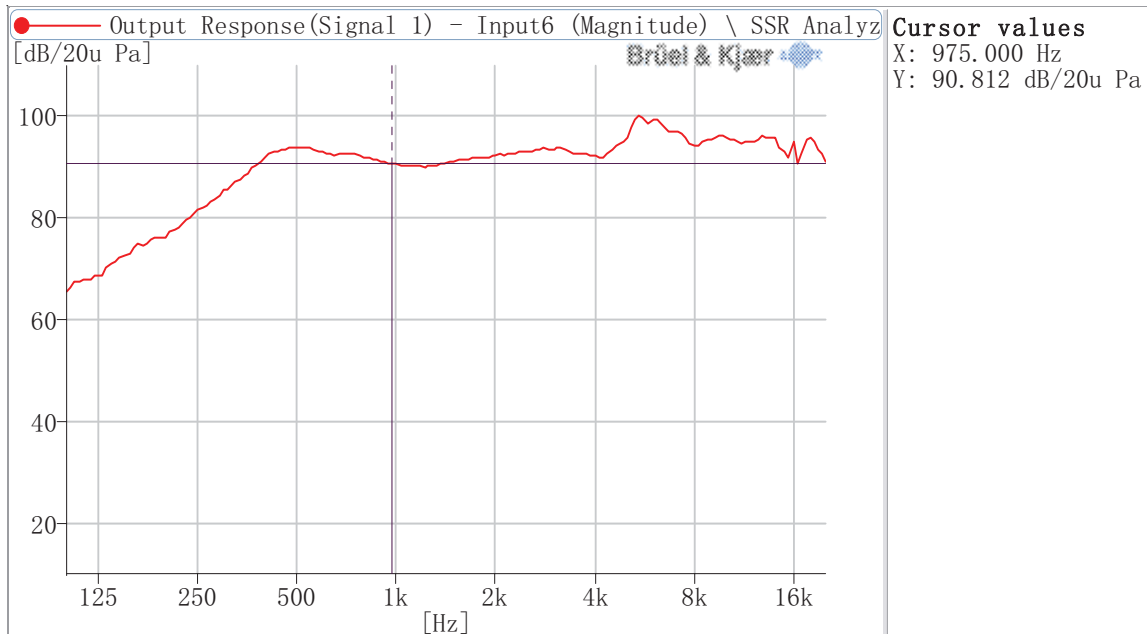
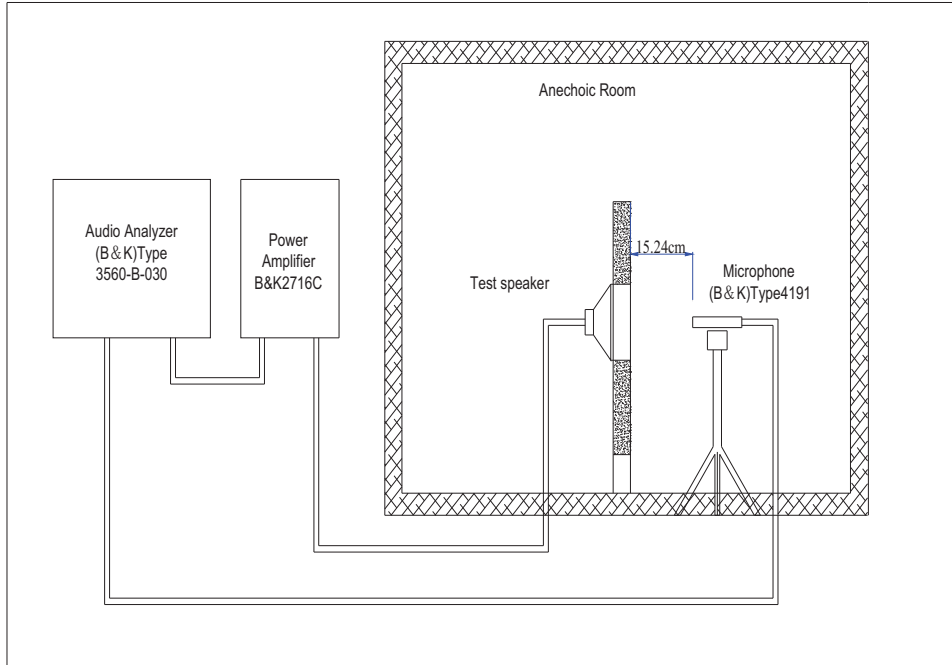
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4. Reliability Test

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).

No	Items	Specification
1	High Temperature Test	After being placed in a chamber with $+120^{\circ}\text{C} \pm 3^{\circ}\text{C}$ for 96 hours and then being placed in natural condition for 1 hour, speaker shall be measured.
2	Low Temperature Test	After being placed in a chamber with $-40\pm 3^{\circ}\text{C}$ for 96 hours and then being placed in natural condition for 1 hour, speaker shall be measured.
3	Humidity Test	 <p>The diagram shows a temperature profile over 24 hours. The temperature starts at -10°C, rises to 25°C at time 'a', stays at 25°C until 'b', drops to -10°C at 'c', stays at -10°C until 'd', rises to 25°C at 'e', stays at 25°C until 'f', drops to -10°C at 'g', stays at -10°C until 'h', rises to 25°C at 'i', and stays at 25°C until the end of the 24-hour cycle. The total duration is 24 hours. The segments are labeled with durations: a: 2.5, b: 3, c: 2.5, d: 2.5, e: 3, f: 2.5, g: 1-4, h: 3.0, i: (unlabeled). Below the diagram, it specifies: a,b,d,e,g,i: 90-98%RH; c,f: 80-98%RH. Unit: hours.</p>
4	Thermal Shock Test	 <p>The diagram shows a thermal shock test profile. The temperature starts at -40°C for 30 minutes, then rises to $+105^{\circ}\text{C}$ for 30 minutes, and this cycle repeats for 1000 cycles.</p>
5	Vibration Test	<p style="text-align: center;">Test under he condition at the packaging</p> <p>Vibration : 10Hz -- 200Hz-- 10Hz/Sweep time 15min,49m/s^2 Accelarion: 49m/s^2(一定/const.) Duration: 2 hour in each of X,Y,Z 3 axes (Total 6h)</p>
6	Fixed Drop Test	Fix onto standard jig, then drop from 1m height to the concrete floor X,Y,Z, 6 direction ,1 time (total 6 times).
7	Load test	After being applied loading white noise with input power 0.4W(4.24Vrms .) for 1000 hours, then placed in natural condition for 1 hour, speaker shall be measured.
8	High Temp.life test	105°C ,440Hz.0.4W.input,500hours
9	Low Temp.life test	-40°C ,440Hz.0.4W.input,500hours
10	Max input test	Room temp.input:440Hz.0.4W.1min/on-2min/off.10 cycles
11	Solder Heat Resistance	1.Soldering into solder bath, 2. Solder temperature $350 \pm 10^{\circ}\text{C}$ Soaking time $3.5\pm 0.5\text{sec}$ 3. Solder temperature $270 \pm 10^{\circ}\text{C}$ Soaking time $10\pm 1\text{sec}$
12	Solderability	Pretreatment: 40°C ,90-95%RHx240hrs Soldering into solderbath:Solder Temp. $265\pm 5^{\circ}\text{C}$ Soaking time $2\pm 0.5\text{sec}$
13	Free drop	Free drop on concrte 1m height. Every 3 surfaceX 1time.Total 3 times.

5. Measurement Block Diagram & Response curve



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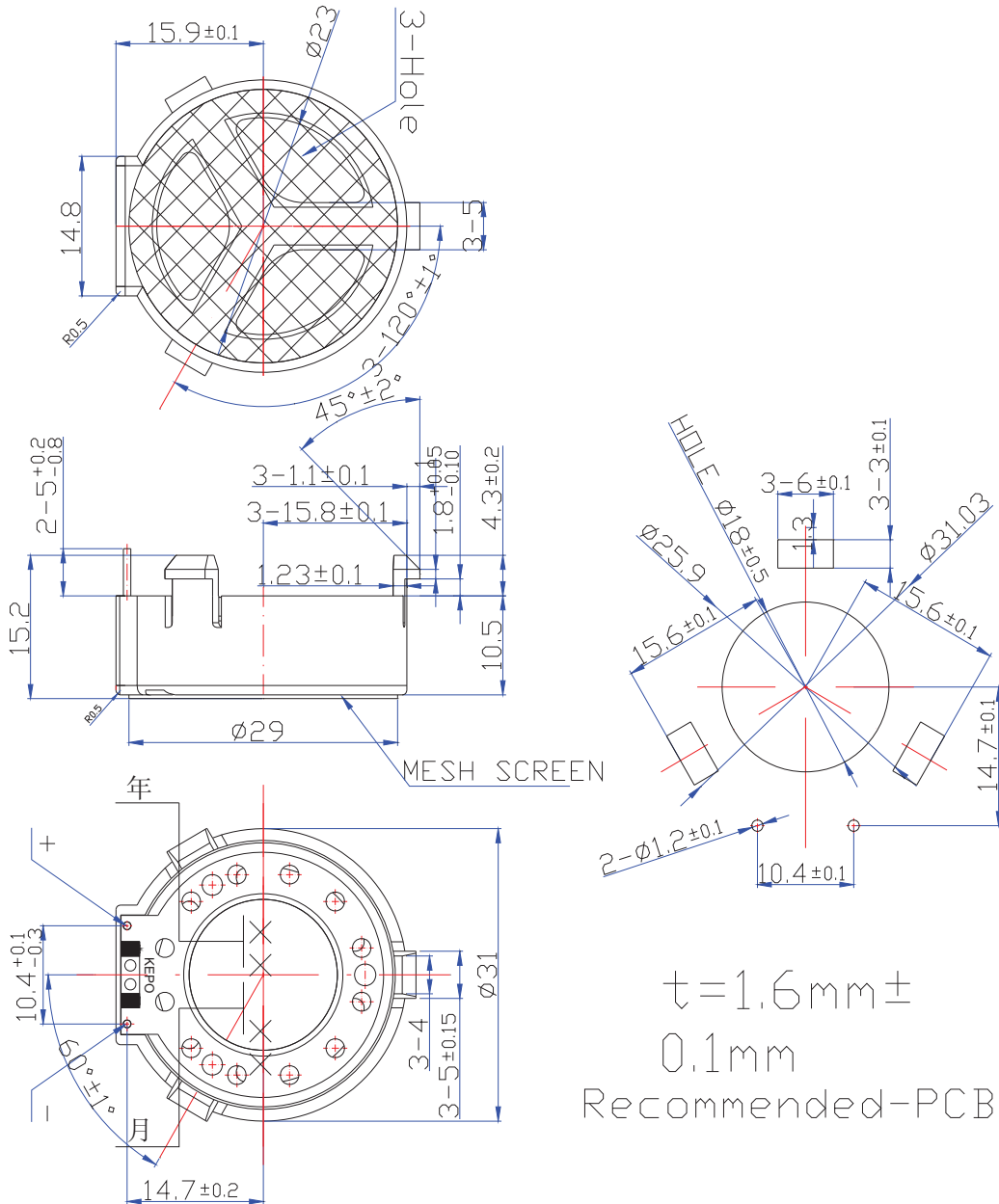
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7. Dimensions



FIRST ANGLE PROJECTION



UNIT : mm

Tolerance : ± 0.3

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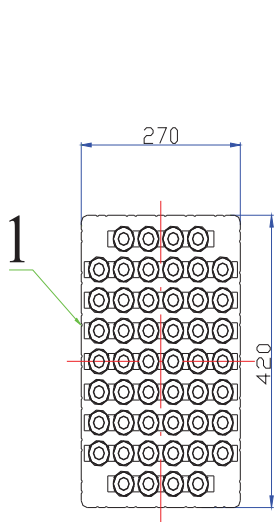
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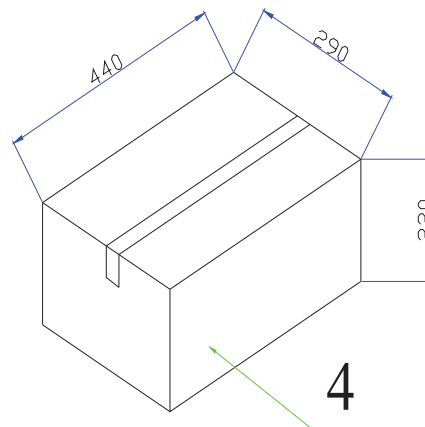
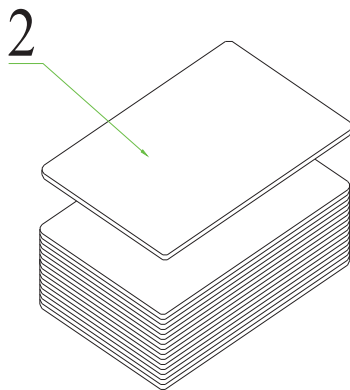
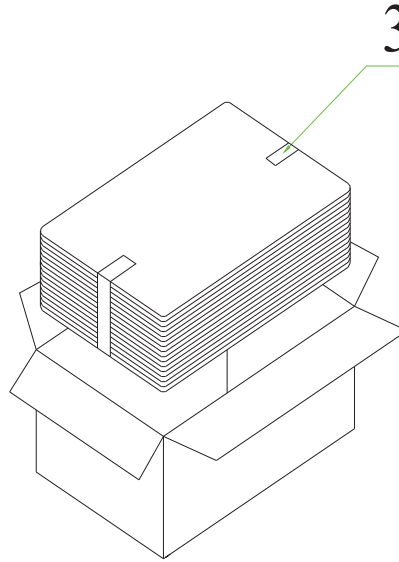
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8. Packing



50Pcs



QTY: 400Pcs

440 x290 x220

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9. Revision

Rev. No.	DATE	PAGE	DESCRIPTION	BOM
1.0	2012-7-31		Primary	

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10.环境法规限制物质等 全废证明书 (Ver.5.10)

IV. 含有物质填写栏(含有率指, 以均质材料的重量为分母的浓度。杂质也为对象。)

规定限制物质名称	含有率ppm	用途、部位	本公司注释
镉(カドミウム)	6	磁钢(用于产品磁路系统)(磁石)	
铅(鉛)	14	磁钢(用于产品磁路系统)(磁石)	
铅(鉛)	25	接插件中的金属端子(用于产品的引出系统)(コネクタの金属端子)	
铅(鉛)	16	SC-121胶(用于产品的引出系统保护)(SC-121接着剂)	
铅(鉛)	31	无铅焊锡丝中的锡(用于产品的连接)(鉛フリーソルダリングの錫)	
铅(鉛)	8	无铅焊锡丝中的松香(用于产品的连接)(鉛フリーソルダリングのコロホニー)	
铅(鉛)	23.5	INK	

若一级供应商为商社或代理店：“一级供应商”栏由商社或代理店填写，“二级供应商”由制造厂家填写。
若一级供应商为制造厂家：请在“一级供应商”栏中填写。“二级供应商”的栏可为空栏。

一级供应商		公司盖章或负责人盖章
发行日期	2009. 03. 31	<div style="border: 1px solid black; width: 100px; height: 100px; margin: auto;"> 负责人 盖章 </div>
公司名称 部门名称	宁波凯普电子有限公司 品質管理部 スピーカー管理チー	
负责人姓名/经办人姓名	章雪萍 (ZHANG XUE PING)	
联系处	TEL:86-574-88371186 FAX:86-574-88370329	
E-mail (经办人)	sales@kepo.com.cn	

二级供应商 (必要时)		公司盖章或负责人盖章
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