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	Revision No.	1.6
Model No. : KP3642ST1R50-6529	Drawing No.	KFC6529

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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 : 36 mm

2.2 Height : 4.2 mm

2.3 Weight : 6.5 g

2.4 Operating Temperature range:

-40 ~+85 °C without loss of function

2.5 Store Temperature range:

-40 ~+90 °C without loss of function

3. Electrical and Acoustic Characteristics.

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

No	Items	Specification
1	Impedance	50 Ω ± 15% (1Vrms at 1.5KHz)
2	Sound Pressure Level	95 dB ± 3dB (0.1w/0.1m at AVE 0.8,1.0,1.2,1.5Hz)
		85 dB ± 3dB 0.5m/10Vpp positive square wave with 800Hz and duty-cycle of 50%
3	Resonance Frequency	600 Hz ± 20%
4	Frequency Range	Fo ~4KHz
5	Input Power	Rated 1.0 W / Max 1.4 W The applied signal has to be a 10Vpp positive square wave with 800Hz and duty-cycle of 50%
6	Distortion	5% Max. at 1kHz 0.1W
7	Buzz and Rattle	Should not be audible buzzes,rattles when the 7.07V sine wave signal swept at frequency range.
8	Polarity	When supplied plus D.C. voltage to (+) terminal, the cone diaphragm must move to forward.
9	Flammability	The material of the membrane has to be of low flammability. The maximum burn-rate Bmax has to be less than 100mm-minute

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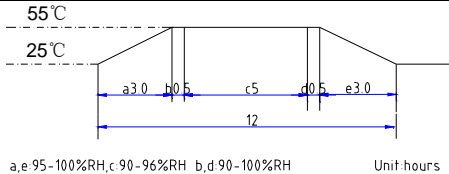
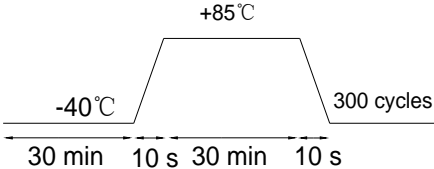
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4. Reliability Test

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 $+90 \pm 3 \text{ }^\circ\text{C}$ for 500 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 $-40 \pm 3 \text{ }^\circ\text{C}$ for 500 hours and then being placed in natural condition for 1 hour, speaker shall be measured.
3	Humidity Test	 <p style="text-align: center;">Unit hours</p> <p style="text-align: right;">6 cycles</p> <p style="font-size: small;">a,e 95-100%RH, c 90-96%RH b,d 90-100%RH</p>
4	Thermal Shock Test	<p>After being placed in a chamber at $+85 \text{ }^\circ\text{C}$ for 30 min, then speaker shall be placed in a chamber at $-40 \text{ }^\circ\text{C}$ for 30 min(1 cycle is the below diagram). After 300 above cycles, speaker shall be measured</p> 
5	Vibration Test	After being applied vibration of amplitude of 1.5mm with 10 to 55Hz band of vibration frequency to each of 3 perpendicular directions for 1 hour, then placed in natural condition for 1 hour, speaker shall be measured.
6	Drop Test	The speaker when mounted in the jig which weight 85g~100g, shall with stand 4 times random drops from a height of 1.0 meter to a concrete floor faced with 5mm thick hard wood board.and be nothing mechanical damage.
7	Load test	After being applied loading white noise with input power 1W(7.07Vrms.) for 1000 hours, then placed in natural condition for 1 hour, speaker shall be measured.
8	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

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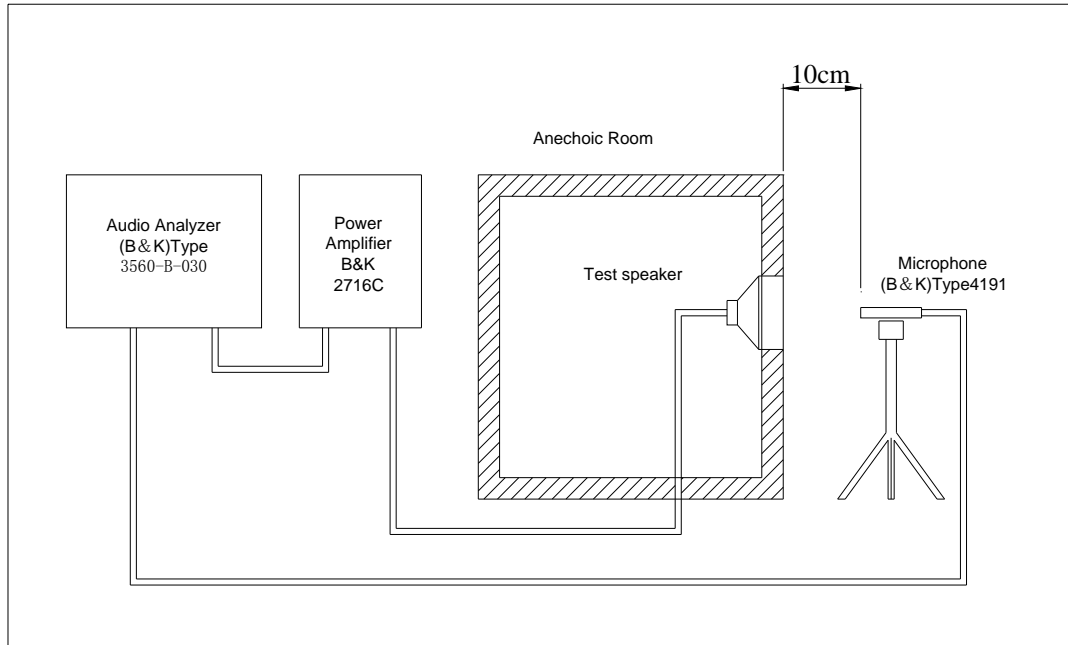
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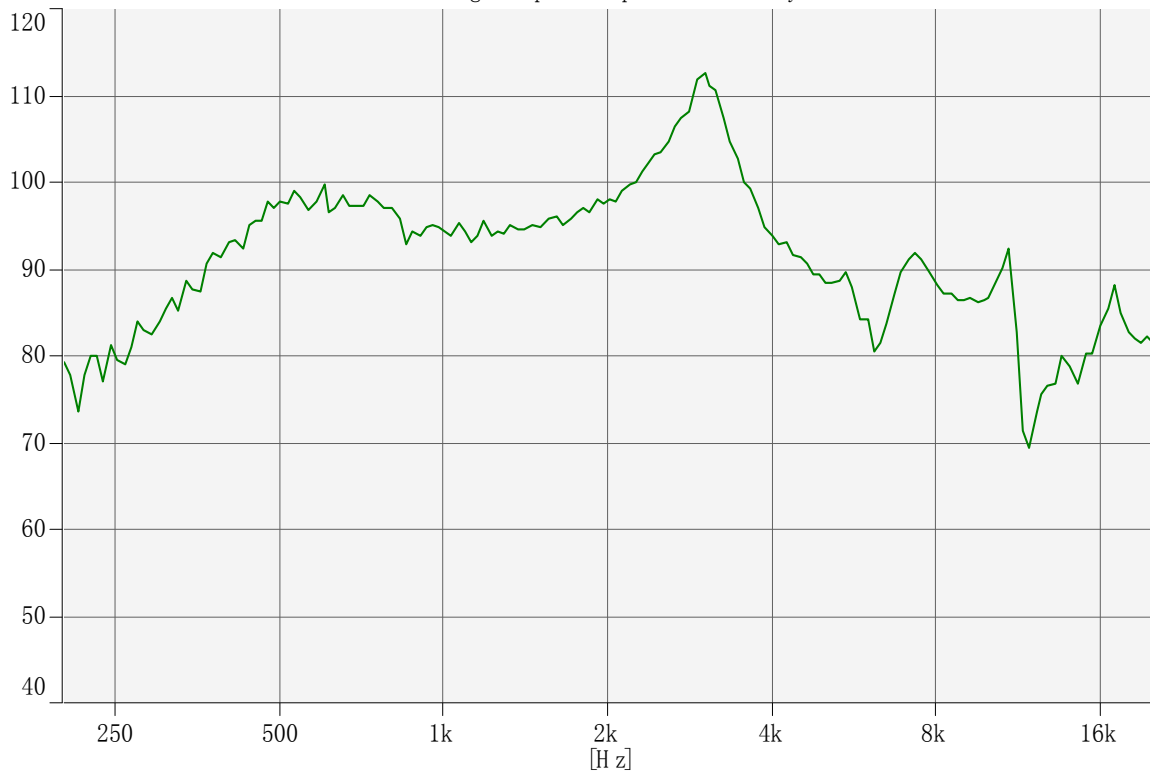
5. Measurement Block Diagram & Response curve



[dB/20.0u Pa]

Output Response (Signal1) - Input (Magnitude)

Working : Input : Input : SSR Analyzer



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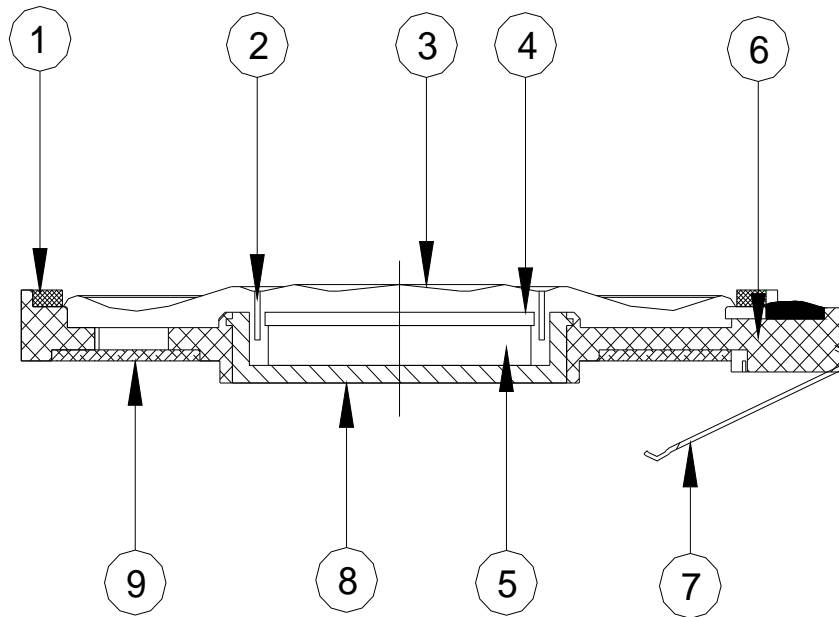
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6. Structure



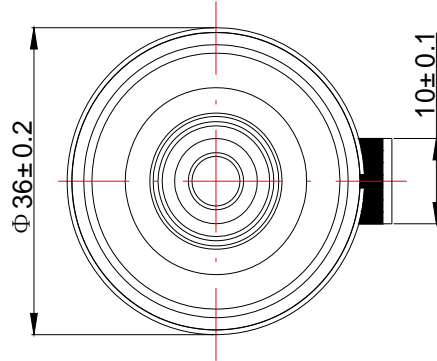
9	Screen	1	Unwoven Fabric	
8	U YOKE	1	SPC	
7	Spring	1	SUS301H	
6	Frame	1	PPA	
5	Magnet	1	Nd-Fe-B	
4	Plate	1	SPC	
3	Diaphragm	1	PEI	
2	Voice Coil	1	Copper	
1	Gasket	1	PBT	
No.	Part Name	Q'ty	Material	Remarks

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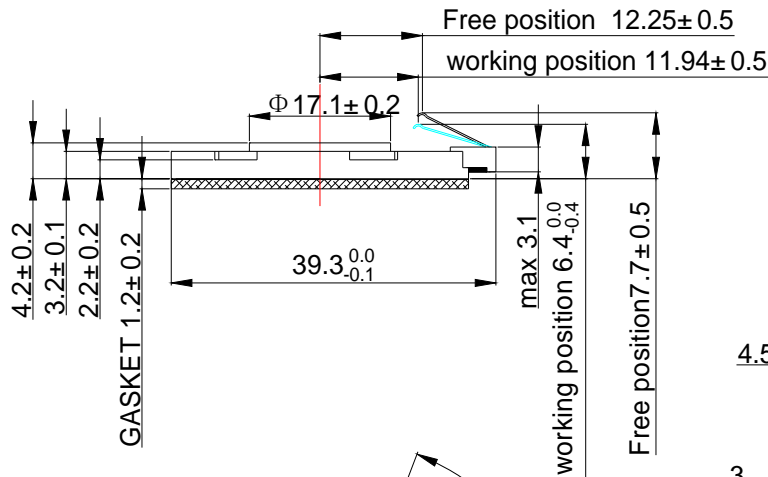
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7. Dimensions



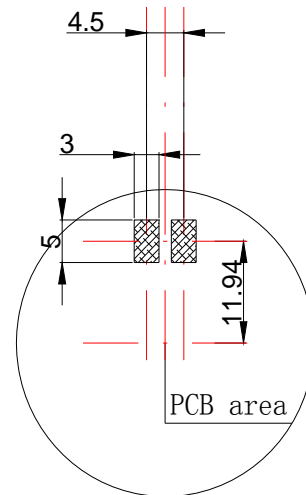
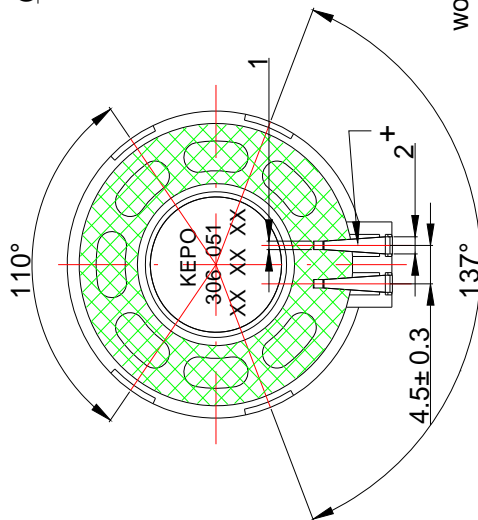
- 1.弹片弹力要求：压至工作位置56小时后，每个弹片弹力 $\geq 0.5N$
- 2.弹片要求表面镀金；镀金厚度 $\geq 0.2 \mu m$



KEPO
306 051
XX XX XX

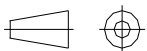
Date Code

Example
ex) 13 02 19
-13:the year 2013
-02:the Month
-19:the Day



PCB接触区域布局图

FIRST ANGLE PROJECTION



UNIT : mm

Tolerance : ± 0.2

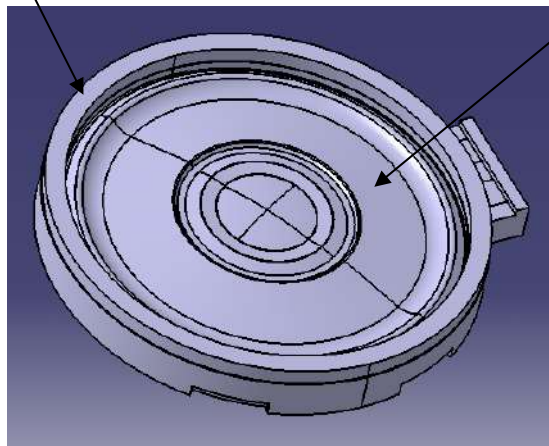
8. Permitted force to Speaker

Max. Permitted compression forces:

No.	from	to	Max force
1	F1	F3	10 N
2	F2		0 N
3	F4	F1	50 N
4	F5	F1	10 N

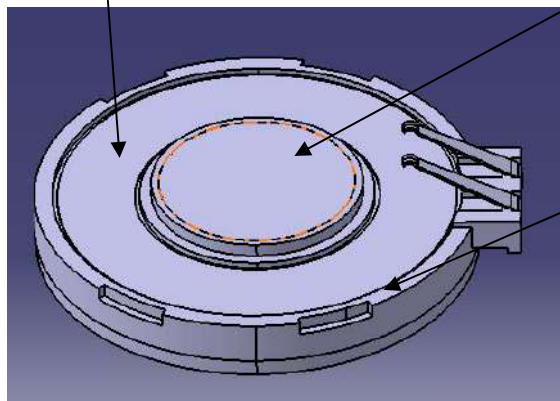
F1: on gasket

F2: on diaphragm



F5: on back of screen

F3: on yoke



F4: on back of frame

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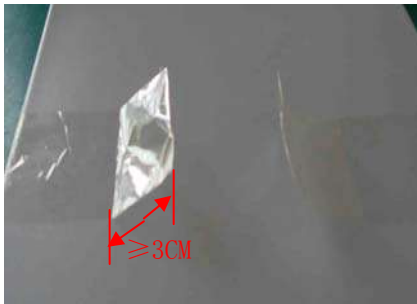
9. Packing



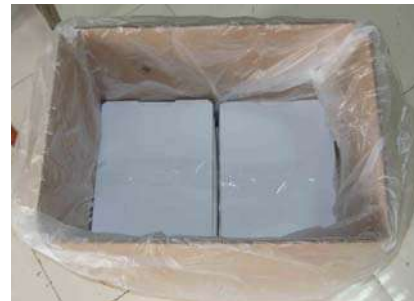
340x240x13mm
每盒32PCS



每沓8盒



每沓打胶带，预留
≥3cm长度的启封



每箱4沓，共1024PCS喇叭



每箱内用塑料袋包装好



490x350x210mm
共：1024PCS