

SPECIFICATION

受 控

Customer :

Applied To :

Product Name : SPEAKER

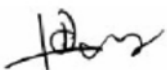
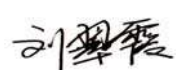
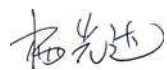
Model Name : SP03A02R8-7790

Drawing No. : KFC7790

Signature of Appronal

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Signature of KEPO

Approved by	Checkde by	Issued by	Date
			



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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 : $\Phi 76$ mm
- 2.2 Height : 39 mm
- 2.3 Weight : 280 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.

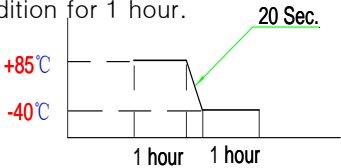
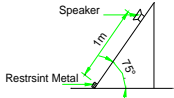
Test condition : 15 ~ 35 °C, 25% ~ 85% RH, 860~1060 mbar

No	Items	Specification
1	Impedance	8 Ω \pm 15% (1Vrms at 1KHz)
2	Sound Pressure Level	\geq 86 dB 1W /1m at1000Hz-2000Hz avg
3	Resonance Frequency	900 Hz \pm 20%
4	Frequency Range	Fo ~4KHz
5	Input Power	Rated 10 W / Max. 20 W
6	Distortion	<10% Max. at 1kHz/2.83Vrms
7	Buzz and Rattle	Should not be audible buzzes,rattles when the 6.3V sine wave signal swept at frequency range.
8	Polarity	When supplied plus D.C. voltage to (+) terminal, the cone diaphragm must move to forward.

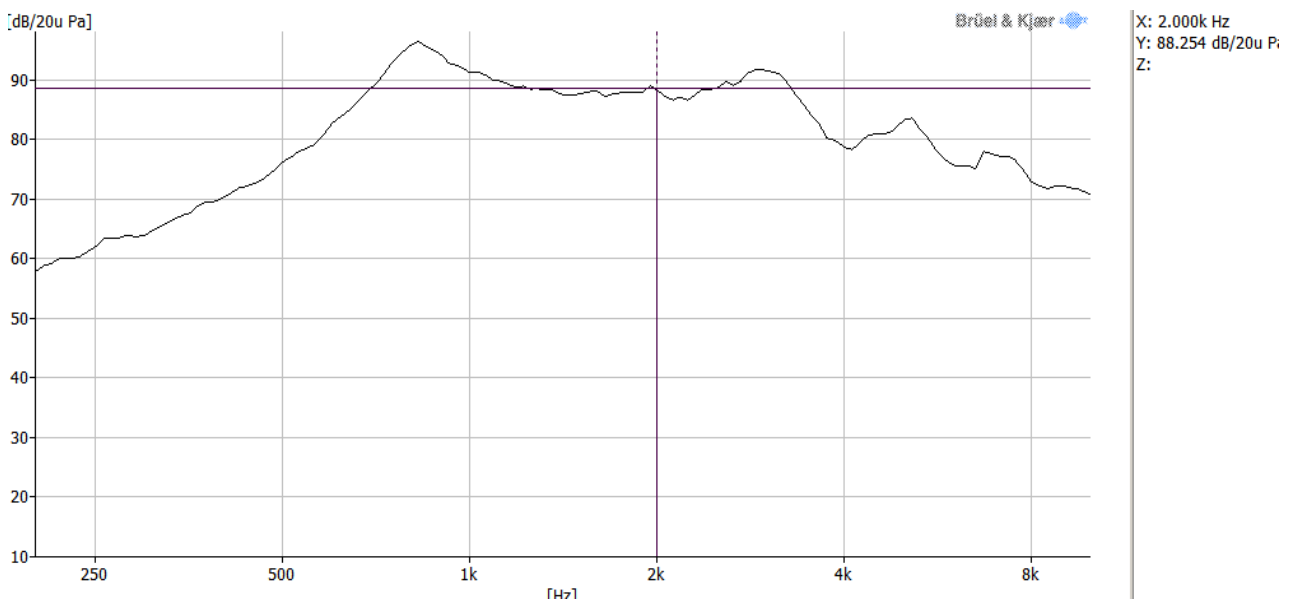
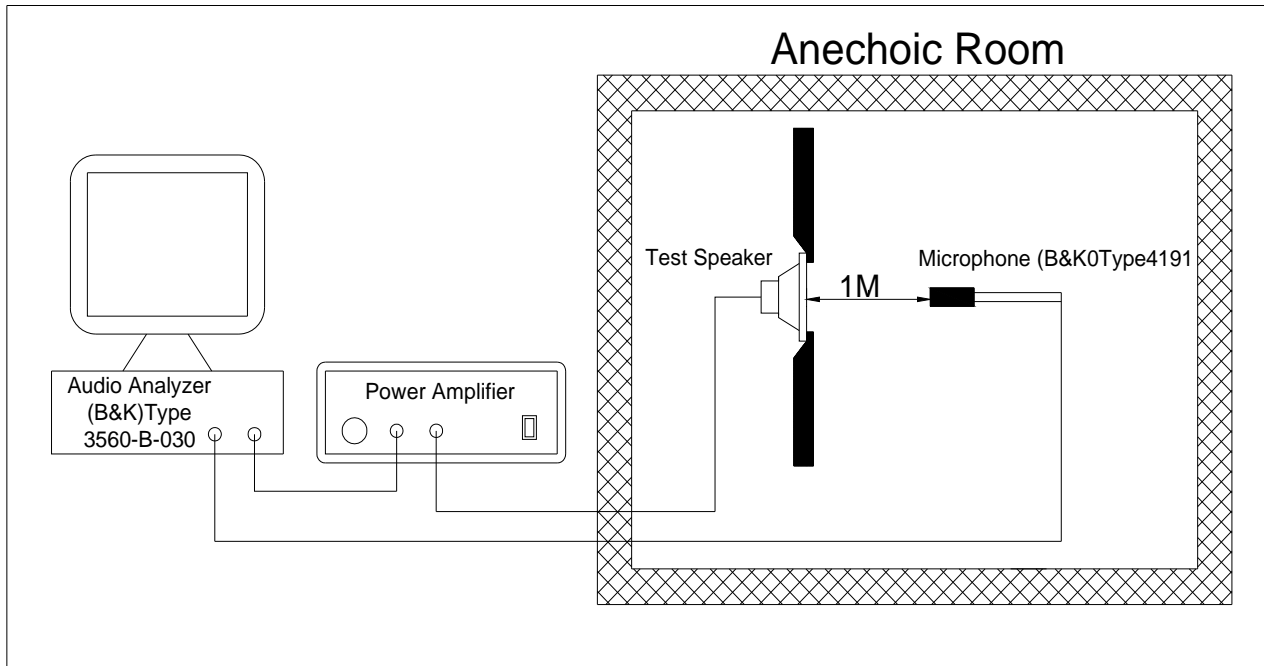
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4. Reliability Test

After test(1~8item), 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).

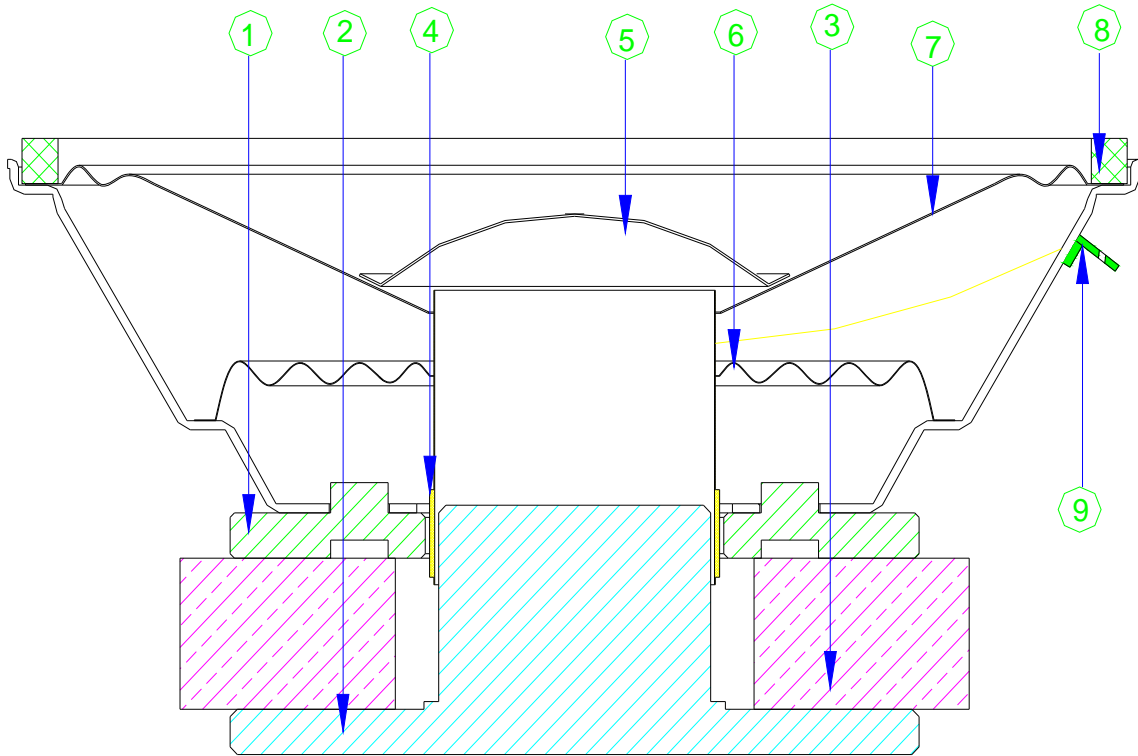
No	Items	Specification
1	High Temperature Test	After being placed in a chamber with $+90\pm 5\text{ }^\circ\text{C}$ for 48 hours and then being placed in natural condition for 1 hour, speaker shall be measured.
2	Low Temperature Test	After being placed in a chamber with $-40\pm 5\text{ }^\circ\text{C}$ for 24 hours and then being placed in natural condition for 1 hour, speaker shall be measured.
3	Humidity Test	After being placed in a chamber with 90 to 95%R.H. at $+40\pm 2\text{ }^\circ\text{C}$ for 24 h and then being placed in natural condition for 1h , sounder shall be measured.
4	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 $-40\text{ }^\circ\text{C}$ for 1 hour(1 cycle is the below diagram).</p> <p>After 10 above cycles, speaker shall be measured after being placed in natural condition for 1 hour.</p> 
5	Vibration Test	After being applied vibration of amplitude of 1.2mm with $10\text{ to }55\text{Hz}$ band of vibration frequency to each of 3 perpendicular directions for 8 hour, then placed in natural condition for 1 hour, speaker shall be measured.
6	Drop Test	<p>A speaker is dropped from 1m in length on 75° inclination and a magnetic circuit of speaker is hitted to the restraint metal.</p> <p>After the test, magnetic circuit should not drop out and speakr should be met the item 11,12.</p> 
7	Load test	After being applied loading white noise with input power $10\text{W}(8.94\text{Vrms.})$ for 96 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 $1\text{ M}\Omega$

5. Measurement Block Diagram & Response curve



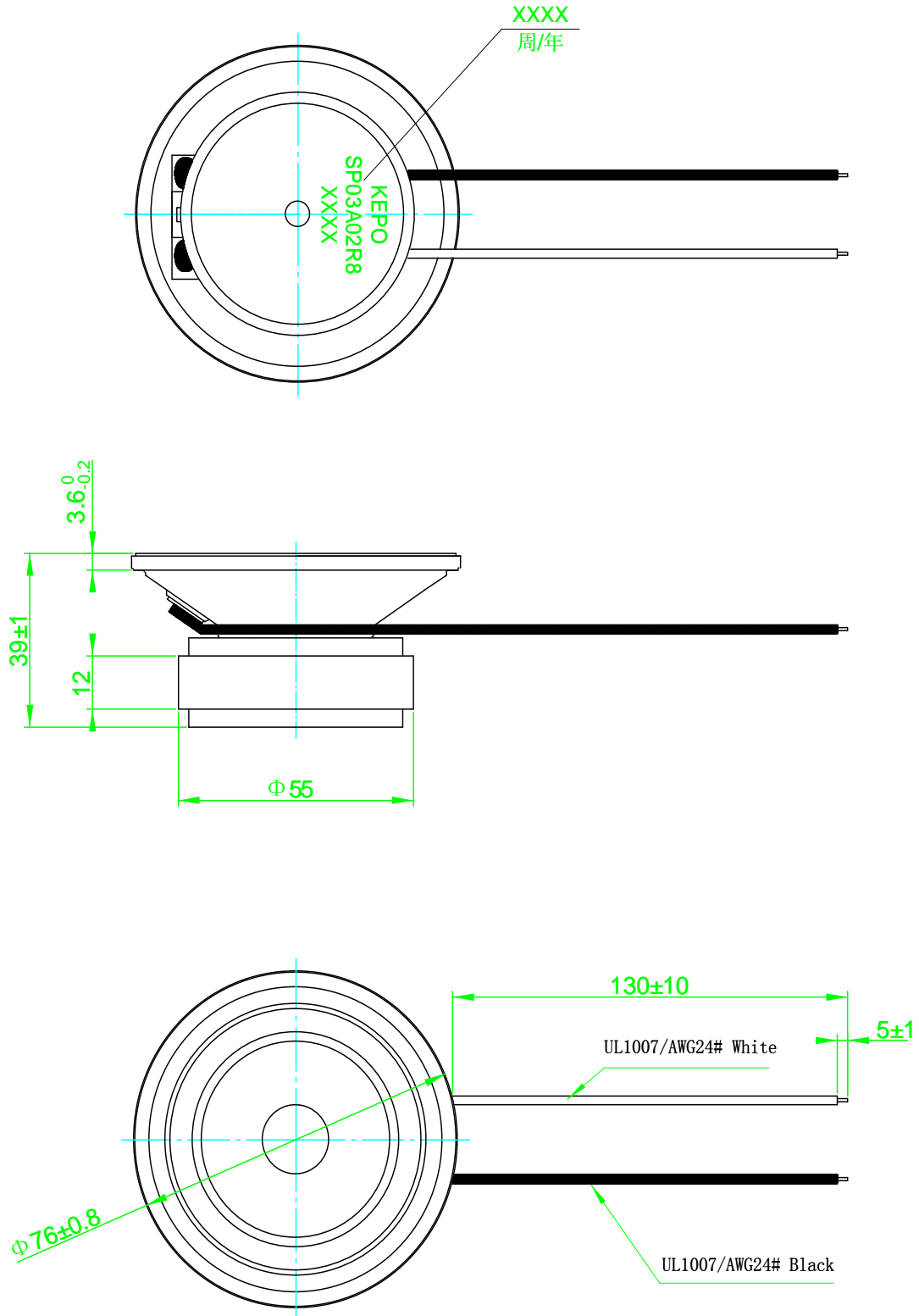
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6. Structure

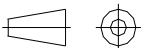


9	Terminal	1	Paper+Copper	
8	Gasket	1	Rubber	
7	Paper Cone	1	Cotton	
6	Spider	1	Cotton	
5	Dust Cap	1	Kraft Paper	
4	Voice Coil	1	KSV	
3	Magnet	1	Y35	
2	Back Plate	1	SPCC	
1	Top Plate	1	SPCC	
No.	Part Name	Q'ty	Material	Remarks

7. Dimensions



FIRST ANGLE PROJECTION



UNIT : mm

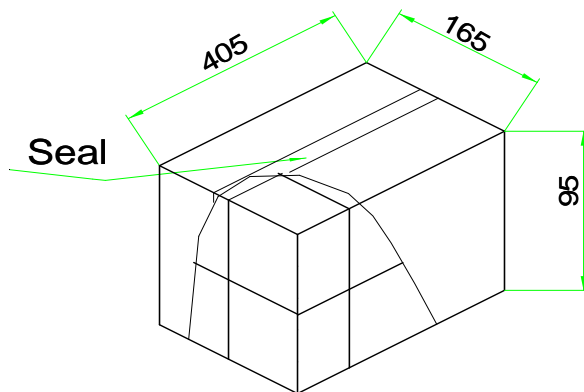
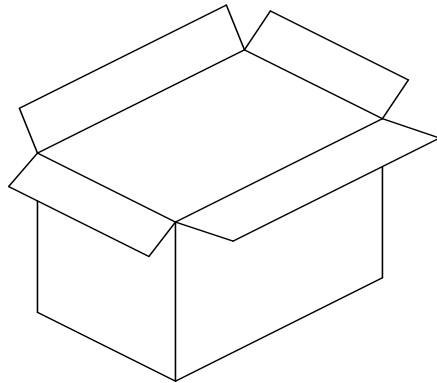
Tolerance : ± 0.5

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8. Packing

Each minimum package unit of products shall be in a carton box and it shall be clearly marked with Part Number ,quantity and outgoing inspection number.

There shall be no mechanical damage on products during transportation and/or in storage.



QTY: 20Pcs
165×405×95mm

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9. Revision

Rev. No.	DATE	PAGE	DESCRIPTION	BOM
1.0	2015-9-22		Primary	