

# SPECIFICATION 受 控

Customer :

Applied To :




Product Name : Speaker

Model Name : KP5075SP1-7524

Drawing No. : KFC7524

Signature of Appronal

Signature of KEPO

Approved by	Checkde by	Issued by	Date
			



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Specification for Speaker	Page	2/9
	Revision No.	1.4
Model No. : KP5075SP1-7524	Drawing No.	KFC7524

## CONTENTS

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

<b>Specification for Speaker</b>	Page	3/9
	Revision No.	1.4
Model No. : KP5075SP1-7524	Drawing No.	KFC7524

## 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 : 50 mm
- 2.2 Height : 8.5 mm
- 2.3 Weight : 17 g
- 2.4 Operating Temperature range:  
-20 ~+50 °C without loss of function
- 2.5 Store Temperature range:  
-30 ~+70 °C without loss of function

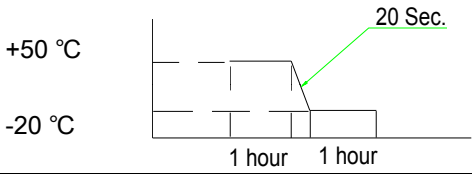
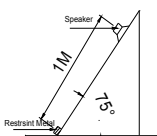
## 3. Electrical and Acoustic Characteristics.

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

No	Items	Specification
1	Impedance	8 Ω ± 15% (1Vrms at 1KHz)
2	Sound Pressure Level	92 dB ± 3dB (0.1W/0.1M AVG at 0.6,0.8,1,1.2KHz)
3	Resonance Frequency	350 Hz ± 20%
4	Frequency Range	Fo ~20KHz
5	Input Power	Rated 1 W / Max. 2.0 W
6	Distortion	10% Max. at 1kHz 1W
7	Buzz and Rattle	Should not be audible buzzes,rattles when the 2.83V sine wave signal swept at frequency range.
8	Polarity	When supplied plus D.C. voltage to (+) terminal, the cone diaphragm must move to forward.

### 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 $+70 \pm 3 \text{ }^\circ\text{C}$ 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 $-30 \pm 3 \text{ }^\circ\text{C}$ for 96 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 85 to 90%R.H. at $+40 \pm 2 \text{ }^\circ\text{C}$ for 96 hours and then being placed in natural condition for 1 hour, speaker shall be measured.
4	Thermal Shock Test	<p>After being placed in a chamber at <math>+50 \text{ }^\circ\text{C}</math> for 1 hour, then speaker shall be placed in a chamber at <math>-20 \text{ }^\circ\text{C}</math> for 1 hour(1 cycle is the below diagram). After 4 above cycles, speaker shall be measured after being placed in natural condition for 10 Sec..</p> 
5	Slide Test	<p>A speaker is dropped from 1m in length on <math>75^\circ</math> inclination and a magnetic circuit of speaker is hitted to the restraint metal.</p> <p>After the test, magnetic circuit should not drop</p> 
6	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.
7	Load test	After being applied loading white noise with input power 1W(2.83Vrms.) 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 MΩ

# Specification for Speaker

Page

5/9

Revision No.

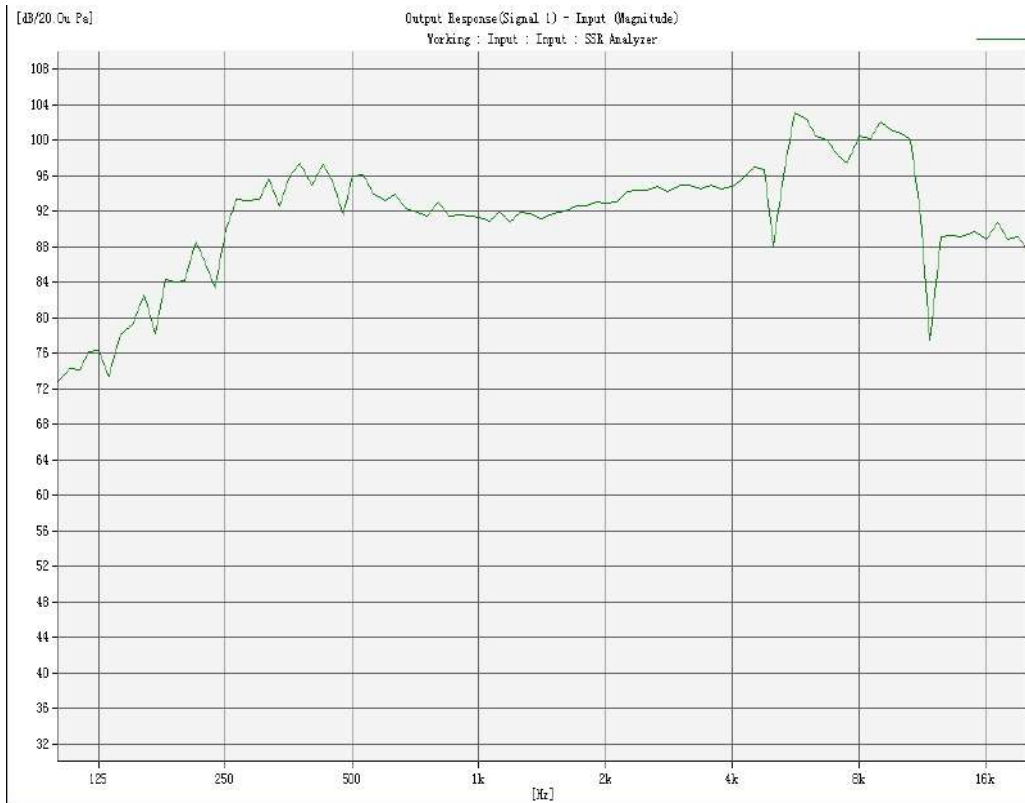
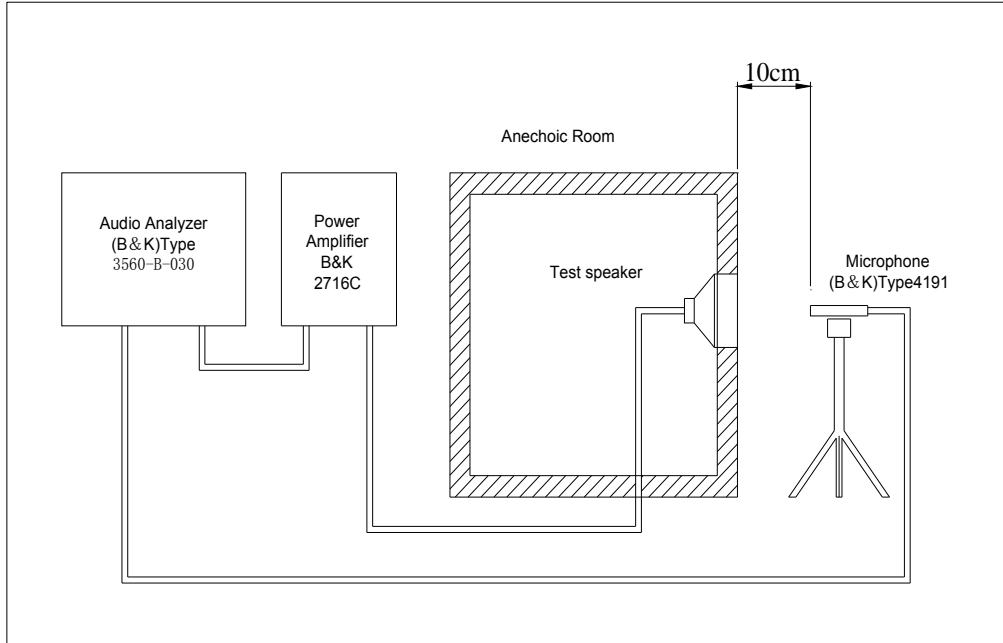
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Model No. : KP5075SP1-7524

Drawing No.

KFC7524

## 5. Measurement Block Diagram & Response curve



# Specification for Speaker

Page

6/9

Revision No.

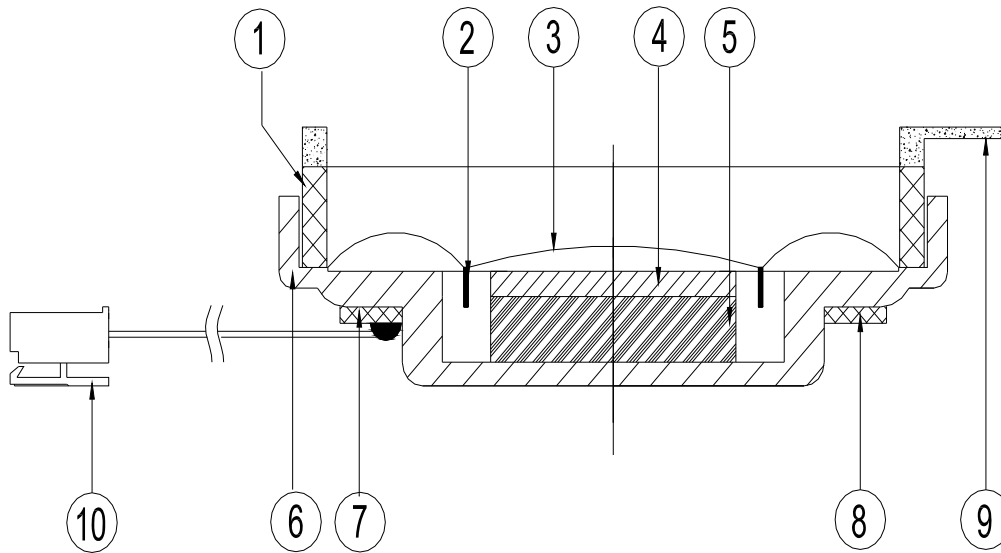
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Model No. : KP5075SP1-7524

Drawing No.

KFC7524

## 6. Structure



10	Connector	1	Housing : SMH200-03P Terminal : YST200 UL1007 AWG24#	
9	Gsaket	1	PSR	
8	Screen	1	Unwoven fabric	
7	Terminal	1	Epoxy	
6	Frame	1	SPCC	
5	Magnet	1	Nd-Fe-B	
4	Plate	1	SPCC	
3	Diaphragm	1	PET	
2	Voice Coil	1	Copper+Paper	
1	Gasket	1	Paper	
No.	Part Name	Q'ty	Material	Remarks

# Specification for Speaker

Page

7/9

Revision No.

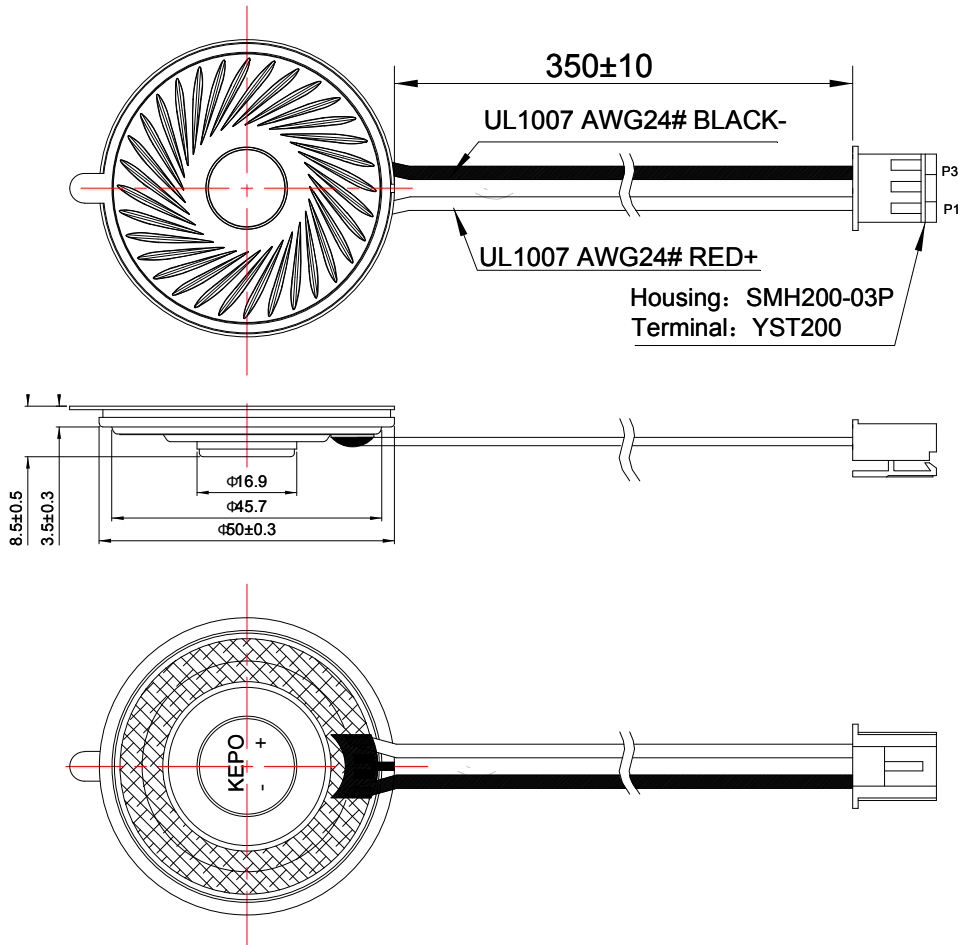
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Model No. : KP5075SP1-7524

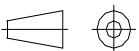
Drawing No.

KFC7524

## 7. Dimensions



FIRST ANGLE PROJECTION



UNIT : mm

Tolerance :  $\pm 0.2$

# Specification for Speaker

Page

8/9

Revision No.

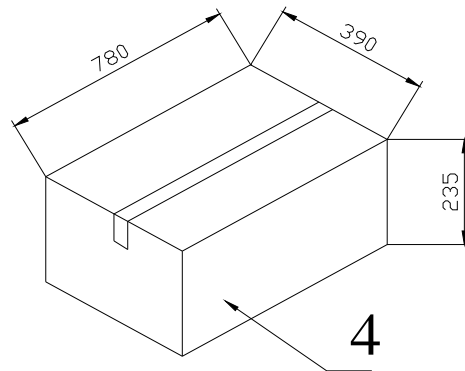
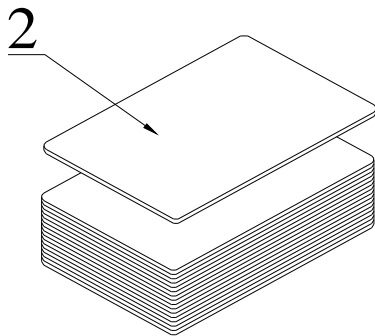
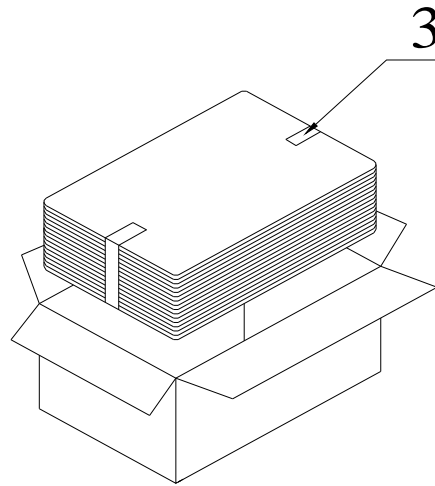
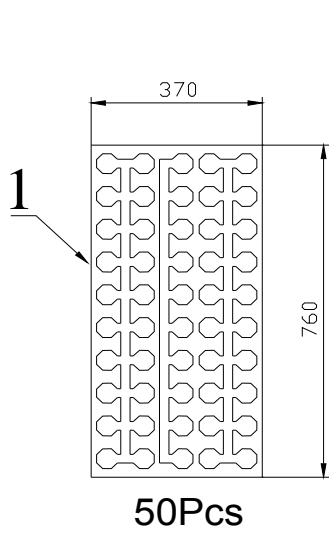
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Model No. : KP5075SP1-7524

Drawing No.

KFC7524

## 8. Packing



QTY:750Pcs  
780 x390 x220



Specification for Speaker		Page	9/9
		Revision No.	1.4
Model No. : KP5075SP1-7524		Drawing No.	KFC7524

**9. Revision**

Rev. No.	DATE	PAGE	DESCRIPTION	BOM
1.0	2014-9-30		Primary	
1.1	2015-1-23		Store Temperature range: -30 ~+60 °C-->-30 ~+70 °C	
1.2	2015-10-9		Change Pack	
1.3	2015-11-4		Change Pack	
1.4	2018-10-12		Equate Connector → Certified Products Connector	