Customer:

Applied To:

Product Name: Speaker

Model Name: KP25x16SP4

Drawing No.:

Signature of Approval

Signature of KEPO

Approved by	Checked by	Issued by	Date
100mm	(sw	主义	

宁波凯普电子有限公司



Ningbo Kepo Electronics Co.,Ltd.

宁波东钱湖镇东钱湖工业区宝源路 25 号

TEL:+86-574-88370330 FAX:+86-574-88370329

No.25 Baoyuan road Dongqian Lake, Industry Area, Dongqian town, Ningbo City, China(Post Code:315121)

Sales@chinaacoustic.com w

www.chinaacoustic com

Spe	ecification for Speaker	Page	2/9
	· · · · · · · · · · · · · · · · · · ·	Revision No.	1.0
Model No. :	KP25x16SP4	Drawing No.	

CONTENTS

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

	Specification for Speaker	Page	3/9
		Revision No.	1.0
Model No.:	KP25x16SP4	Drawing No.	

1. Scope

This specification is applied to the dynamic speaker which is used all of the electrical acoustic product.

- -- compact, rich sound
- -- applications: telephone, computer, etc. ..

2. General

2.1 Out-Diameter:

25x16 mm

2.2 Height

5.5 mm

2.3 Weight

2.5 gr.

2.4 Operating Temperature range:

-20~+60℃ without loss of function

2.5 Store Temperature range:

-30~+80℃ without loss of function

3. Electrical and Acoustic Characteristics.

Test condition : 15 ~ 35 $^{\circ}$ C, 25% ~ 85% RH, 860~1060 mbar

	Items	Specification
1	Impedance	8 Ω ± 15%(at 1Vrms,2kHz)
2	Sound Pressure Level	79 dB ± 3dB(1W/1M)At AVG 2.0KHz,2.5KHz,3.0KHz,4.0KHz
3	Resonance Frequency	1280 Hz ± 25%
4	Frequency Range	f₀ ~ 18.0kHz
5	Input Power	Rated 0.8W / Max. 1.3W
6	Distortion	<5% Max. at 1kHz/0.8W
7	Buzz and Rattle	Should not be audible buzzes,rattles when the 0.8W 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	Diaphragm Moving Range	When supplying the sinusoidal signals at following voltage in the specified frequency range, the range within which the viburation part can move over the frame, shall be measurd.(without scoustic loading or baffle) constant voltage:2.54v,frequency range:f0 to 20KHz,0.6mm or less

Specification for Speaker		Page	4/9
	·	Revision No.	1.0
Model No.:	KP25x16SP4	Drawing No.	

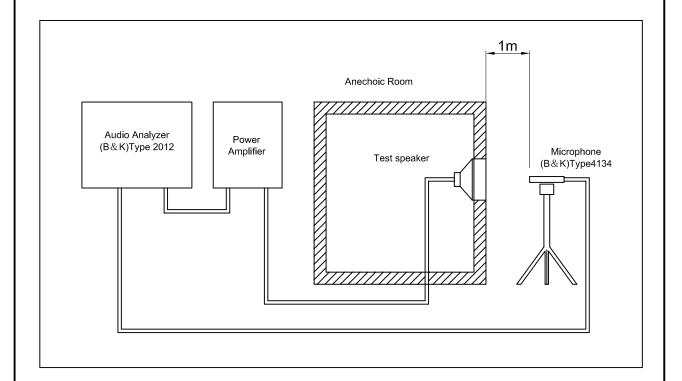
4. Reliability Test

After test(1~7item), the speaker S.P.L . difference shall be within \pm 3dB,and the appearance not exist any change to be harmful to normal operation(e.g.cracks,rusts,damages and especially distortion).

	Item	Specification
1	High Temperature Test	After being placed in a chamber with $60\pm3~^{\circ}\mathrm{C}$ for 168 hours and then being placed in natural condition for 2 hours, speaker shall be measured.
2	Low Temperature Test	After being placed in a chamber with -20± 3 °C for 168 hours and then being placed in natural condition for 2 hours, speaker shall be measured.
3	Humidity Test	After being placed in a chamber with 95%R.H. at 50±2 $^{\circ}$ C for 168 hours and then being placed in natural condition for 2 hours, speaker shall be measured.
4	Temperature cycling Test	After being placed in a chamber with -20°C for 2 hours,then changed the temperature from -20°C to 60°C for 2 hours,kept on the temperature 60°C for 2 hours,then changed the temperature from 60°C to -20°C for 2 hours(1 cycle is the below diagram). After 15 cycles,the speaker shall be measured after being placed in natural condition for 2 hours.
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 direction for 1 hour, then placed in natural condition for 2 hours, speaker shall be measured.
6	Drop Test	The speaker shall with stand 1 time and difference 6 sides drop from a height of 1 meter to a concrete floor with 5 mm thick hard wood board and be nothing mechanical damage, without irregularity in sound, volume and operation.
7	Load test	After being applied loading white noise with input power 0.8 W(2.53Vrms.) for 100 hours, then placed in natural condition for 2 hours, 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

	Specification for Speaker	Page	5/9
		Revision No.	1.0
Model No. :	KP25x16SP4	Drawing No.	

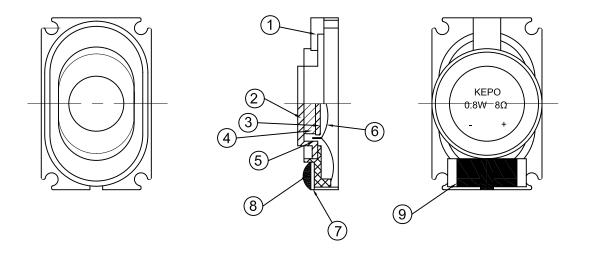
5. Measurement Block Diagram & Response curve





Specification for Speaker		Page	6/9
<u> </u>	'	Revision No.	1.0
Model No.:	KP25x16SP4	Drawing No.	

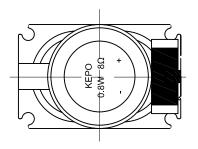
6. Structure

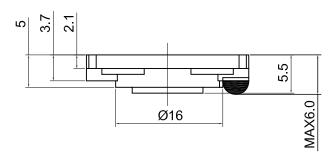


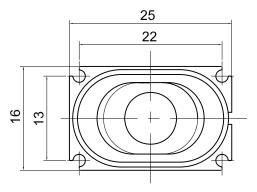
9	保护胶	氯丁橡胶(HD-358B)
8	焊锡	无铅焊锡 Sn99.3Cu0.7
7	端子板	FR-4
(6)	振动板	纤维布 黑色
(5)	线圈	自粘漆包线 Φ 0.05 绕2层
4	磁石	NdFeB Φ8.0X1.0t三价铬镀锌
3	金属板	SPCC
2	金属帽	SPCC Ø9.7x1.8t三价铬镀锌
1	框架	PBT 4830(黑色) UL94V-0
NO.	部品名称	材质. 规格. 处理

	Specification for Speaker	Page	7/9
'		Revision No.	1.0
Model No.:	KP25x16SP4	Drawing No.	

7. Dimensions







FIRST ANGLE PROJECTION



UNIT :

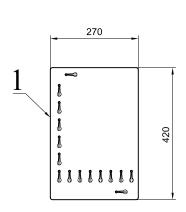
mm

Tolerance:

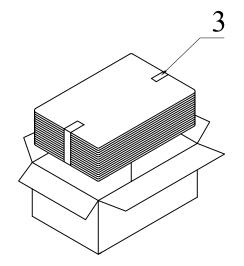
±0.2

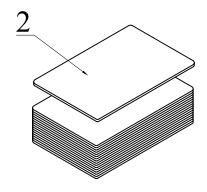
Specification for Speaker		Page	8/9
<u>'</u>		Revision No.	1.0
Model No.:	KP25x16SP4	Drawing No.	

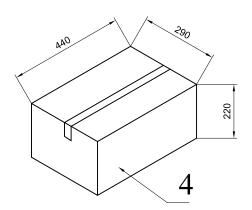
8. Packing



100Pcs







QTY: 2000Pcs 440 x290 x220

	Specification for Speaker Page 9/9					
Mode	el No. :			Revision No.	1.0	
iviout			KP25x16SP4	Drawing No.		
9.	Revisio	n				
Rev. No.	DATE	PAGE	DESCRIF	TION		ВОМ
1.0	2010.12.03		Prima	ry		