SPECIFICATION

受 控

Customer: Applied To:

Product Name: SPEAKER

Model Name: KPB2644C550-2-8357

Drawing No.: KFC8357

Compliance with ROHS (本品符合 ROHS 指令)

Signature of Appronal

Signature of KEPC	ure of KEPO	Signatu
-------------------	-------------	---------

Issued by	Checked by	Approved by	Date
忻客荣	13	Jan -	



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

ADD: No.25 Baoyuan road, Dongqian Lake Industry Area, Dongqian town, Ningbo

City, China (Post Code: 315121)

Email: Sales@chinaacoustic.com http://www.chinaacoustic.com

Specification for Speaker	Page	2/8
opcomeation for opeation	Revision No.	1.1
KPB2644C550-2-8357	Drawing No.	KFC8357

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

		1	T	
1.1	2019.03.25		UL1007 AWG24# Switch to stranded wire,	
			L550+30/-0→L530+30/-0	
1.0	2018.10.12		Primary	
Rev.	DATE	PAGE	DESCRIPTION	SIGN
		•		

Revision

Specification for Speaker	Page	3/8
opcomoditor ror opcontor	Revision No.	1.1
KPB2644C550-2-8357	Drawing No.	KFC8357

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: 35.4X50.7 mm

2.2 Height: 16mm2.3 Weight: 17.5g

2.4 Operating Temperature range:

-30~+85°C without loss of function

2.5 Store Temperature range:

-40~+85°C 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	8Ω±15%(1Vrms at 1000Hz)	
2	Sound Pressure Level	90dB±3dB 0.1W/0.1M average	
	Sound Flessure Level	at 1.0,1.2,1.5,2kHz	
3	Resonance Frequency	350Hz±20% at 1V	
4	Frequency Range	Fo ~10KHz	
5	Input Power	Rated 1.0W/Max. 1.2W	
6	Distortion	<10% Max. at 2kHz/1Vrms	
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.	

Specification for Speaker	Page	4 / 8
opcomoditori rei opcartor	Revision No.	1.1
KPB2644C550-2-8357	Drawing No.	KFC8357

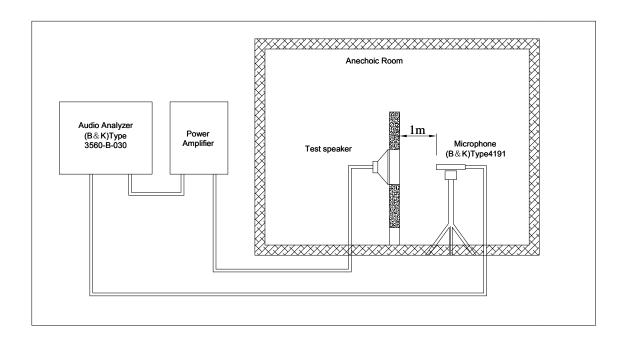
4. Reliability Test

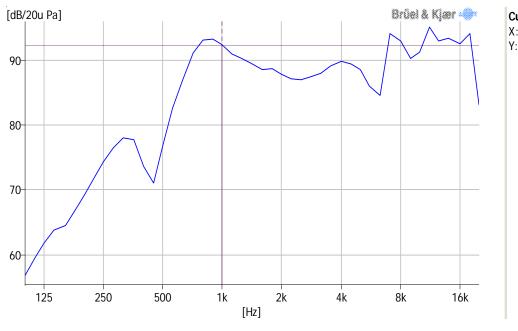
After test($4.1\sim4.8$ item), the speaker S.P.L . difference shall be within ±3 dB, and the appearance not exist any change to be harmful to normal operation(e.g. cracks,rusts,damages and especially distortion).

	Items	Specification		
4.1	High Temperature Test	After being placed in a chamber with +85 $\pm 3~^{\circ}$ C for 96 hours and then being placed in natural condition for 1 hour, speaker shall be measured.		
4.2	Low Temperature Test	After being placed in a chamber with -40 ±3 $^{\circ}\mathrm{C}$ for 96 hours and then being placed in natural condition for 1 hour, speaker shall be measured.		
4.3	Humidity Test	After being placed in a chamber with 85 to 90%R.H. at $+40\pm2$ °C for 96 hours and then being placed in natural condition for 1 hour, speaker shall be measured.		
4.4	Thermal Shock Test	After being placed in a chamber at +85°C for 1 hour, then speaker shall be placed in a chamber at -30°C for 1 hour. (1 cycle is the below diagram). After 6 above cycles, speaker shall be measured after being placed in natural condition for 1 hour. **85°C** **10 **10 **10 **10 **10 **10 **10 *		
4.5	Vibration Test	After being applied vibration of amplitude of 1.5mm with 10 to55Hz 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.		
4.6	Drop Test	The speaker shall with stand 15 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.		
4.7	Load test	After being applied loading white noise with input power 1W (2.83 Vrms.) for 96 hours, then placed in natural condition for 1 hour, speaker shall be measured.		
4.8	Insulation test	When they are measured with DC 100V the insulation resistance between v.c. terminal and frame must be more than 1 $\mbox{M}\Omega$		

Specification for Speaker	Page	5/8
	Revision No.	1.1
KPB2644C550-2-8357	Drawing No.	KFC8357

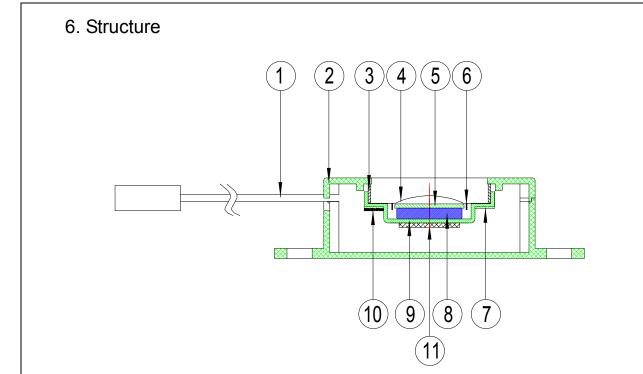
5. Measurement Block Diagram & Response curve





Cursor value X: 1.000k Hz Y: 92.457 dB/

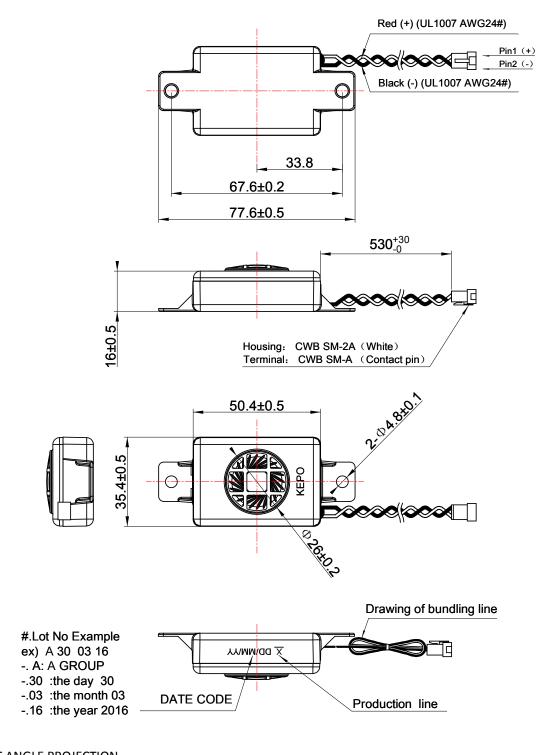
Specification for Speaker	Page	6/8
opcomoditori roi opcontori	Revision No.	1.1
KPB2644C550-2-8357	Drawing No.	KFC8357



11	Gasket	1	EVA	
10	Terminal	1	FR-4	
9	Frame	1	SPCC	
8	Magnet	1	Nd-Fe-B	
7	Screen	1	Unwoven Fabric	
6	V-coil	1	Copper	
5	Plate	1	SPCC	
4	Diaphragm	1	Mylar	
3	Gasket	1	Paper	
2	HOUSING	1	ABS	
			Housing: CWB SM-2A (White)	
1	Connector	1	Terminal: CWB SM-A	
			UL1007 AWG24#	
No.	Part Name	Q'ty	Material	Remarks

Specification for Speaker	Page	7 / 8
opcomoditori roi opcontori	Revision No.	1.1
KPB2644C550-2-8357	Drawing No.	KFC8357

7. Dimensions Red (+) (UL1007 AWG24#)



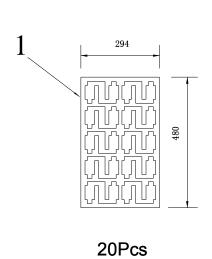
FIRST ANGLE PROJECTION

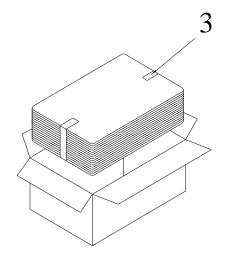
UNIT: mm

Tolerance: ± 0.5

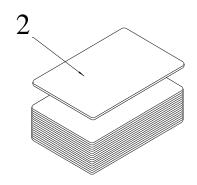
Specification for Speaker	Page	8/8
KPB2644C550-2-8357	Revision No.	1.1
	Drawing No.	KFC8357

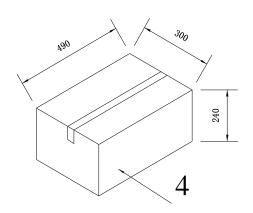
8. Packing











QTY:200Pcs 490 x300 x240mm