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SPECIFICATION FOR APPROVAL

Speaker

Part Number	OWS-1636LA-8B
Note	This item was compliance with the following requirements: 1. RoHS directive 2. REACH
Customer P/N	

Ole Wolff	Signature / Date	Prepared	Checked	Approved
		TANQIANFENG 21.08.17		

Customer	Signature / Date	Confirmation		

REVISION NOTES:

Date	Rev.	Description of Revision
2021.08.17	A	Initial release

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1. SCOPE

THIS SPECIFICATION IS APPLIED FOR A DYNAMIC SPEAKER.

2. TEST CONDITIONS

TEMPERATURE : 15 °C ~ 35 °C

HUMIDITY : 45%~85% (R.H.)

ATMOSPHERE : 860 ~ 1060 hPa

3. GENERAL REQUIREMENTS

OPERATING TEMPERATURE RANGE: -25 °C ~ 60 °C

STORAGE TEMPERATURE RANGE: -25 °C ~ 60 °C

4. MECHANICAL LAYOUT & DIMENSIONS

DIMENSIONS : SHOWN IN FIGURE.5

NET WEIGHT: approx 1.3+/-0.5g

5. ELECTRICAL AND ACOUSTICAL CHARACTERISTICS

1	Resonance Frequency	900±20% Hz/0.3W (1.55V) input power
2	Impedance	8 ± 15% (at 4KHz/1.55V)
3	Sensitivity	94±3 dB AT 1KHz 0.3W(1.55V)/0.1m Shown in Fig.2
4	Input Power	(Nom./Max.): 0.5 W / 0.8 W
5	Frequency Response	Shown in fig.2
6	Total Harmonic Distortion (THD)	THD shown in fig.3
7	Buzz & Rattle	2.0V 400~10KHz

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6. RELIABILITY TEST REQUIREMENTS.

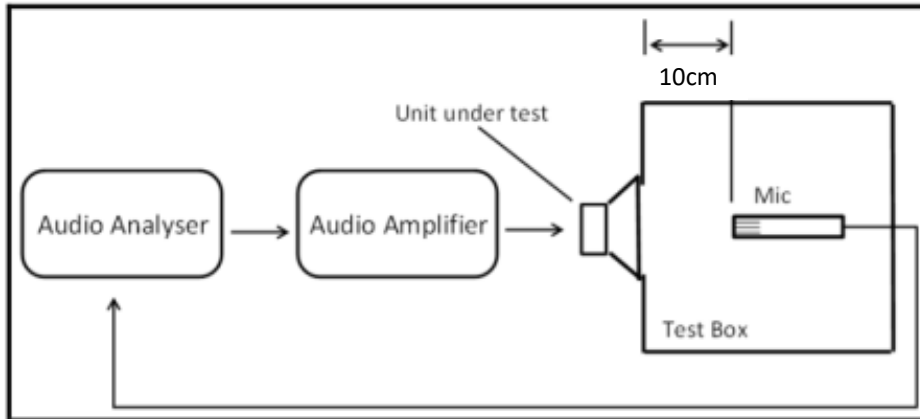
After any following tests the S.P.L should not deviate more than $\pm 3\text{dB}$ from initial value.		
No.	ITEMS	TEST CONDITION
1.	High temp. Test	Keep 96 hours at $+60^{\circ}\text{C}\pm 3^{\circ}\text{C}$ and leave 3 hours in normal temperature and then check
2.	Low temp. Test	Keep 96 hours at $-25^{\circ}\text{C}\pm 3^{\circ}\text{C}$ and leave 3 hours in normal temperature and then check
3.	Humidity test	Keep 96 hours at $+40^{\circ}\text{C}\pm 3^{\circ}\text{C}$ relative humidity 90~95% and leave 3 hours in normal temperature and then checked.
4.	Thermal cycle test.	Low temperature: $-30^{\circ}\text{C}\pm 3^{\circ}\text{C}$, temperature: $+60^{\circ}\text{C}\pm 3^{\circ}\text{C}$, cycle: 2 hour/cycle each, and then keep 5 cycles in a room.
5.	Vibration	Frequency: 50Hz/min Amplitude: 1.5mm X, Y, Z 3 direction. 2 hours each, total 6 hours.
6.	Drop test(for sample)	Height: 1m Total times: 10 times
7.	Drop test(for package)	The speaker shall be fixed in cabinet, packed with carton and dropped 1m height vertically to 10cm wooden board. (one point, three corners, six sides. 1 times each, total 10 times.)
8.	Load test	Rated Power Pink noise is applied for 96 hours
9.	MAX. SHORT TERM POWER TEST	Max power Sine wave 1sec ON, 1min OFF, 60cycles

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7. ELECTRICAL CHARACTERISTICS MEASUREMENT (FIGURE.1)

MEASUREMENT CIRCUIT FOR DYNAMIC SPEAKER



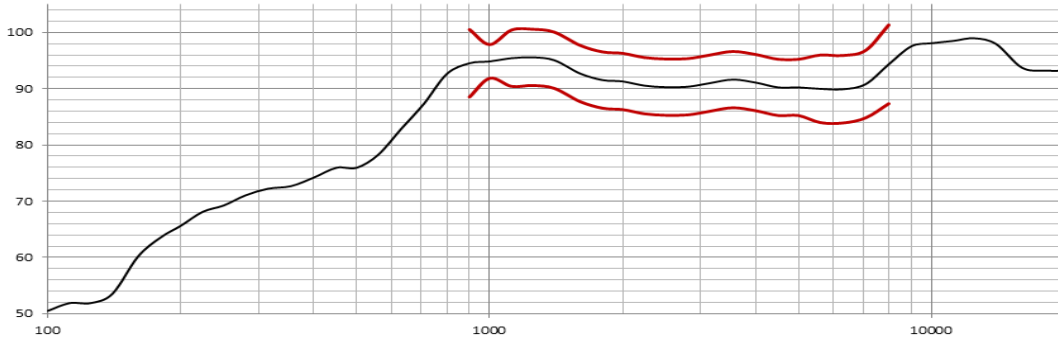
NO	EQUIPMENT	REMARKS
1	UNIT UNDER TEST	SPEAKER
2	TEST BOX	OLE WOLFF STANDARD BOX
3	AUDIO POWER AMPLIFIER	LEM DPA300
4	ANALYZER	LISTEN SOUNDCHECK

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8. STANDARD FREQUENCY RESPONSE CURVE(Fig.2)

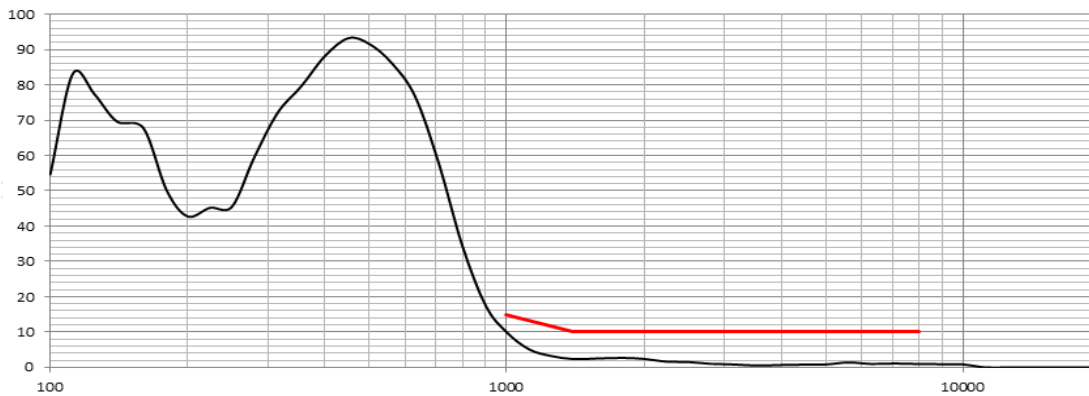
Test condition:1.55Vrms/10cm 1/60CTIVE



Hz	900	...	1000	...	5000	...	8000
dB (Up)	+6	+6	+3	+5	+6	+6	+7
Hz	900	...	1000	...	5000	...	8000
dB (Down)	-6	-6	-3	-5	-5	-6	-7

9. STANDARD THD CURVE(Fig.3)

Test condition:1.55Vrms/10cm 1/60CTIVE



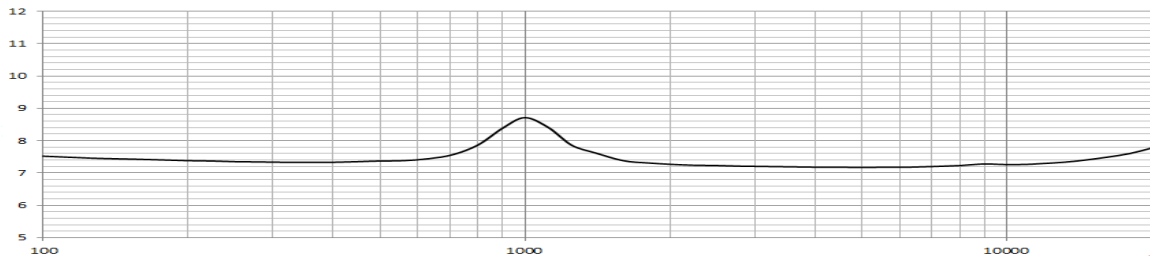
Hz	1000	1400	8000		
THD% (Up)	15	10	10		

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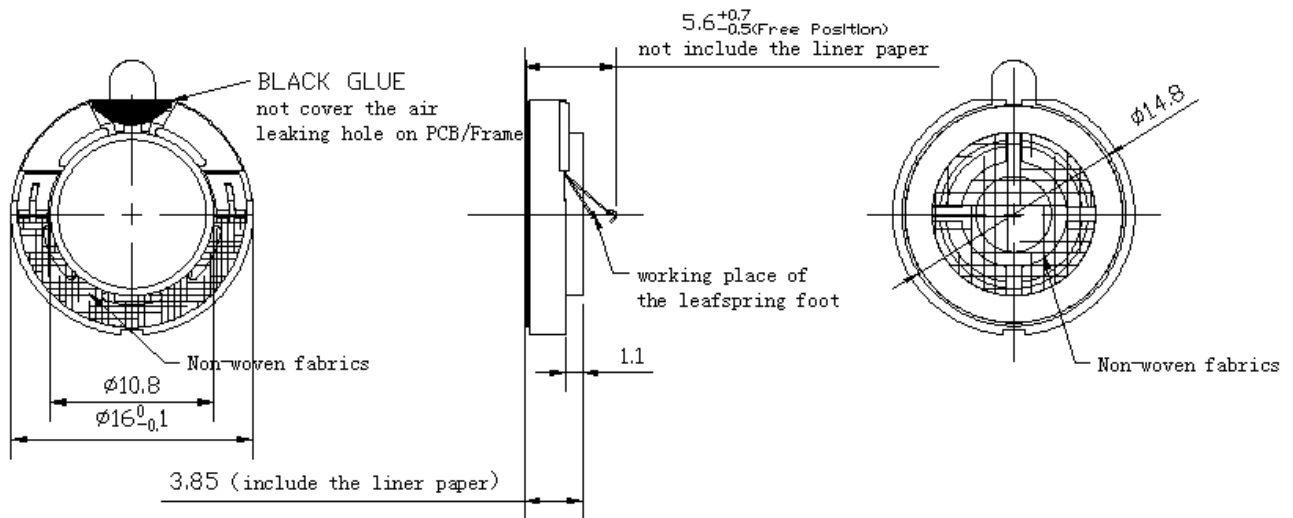
10. IMPEDANCE RESPONSE CURVE(fig.4)

Test condition:1.55Vrms/10cm 1/60CTIVE



11.OUTVIEW (Fig.5)

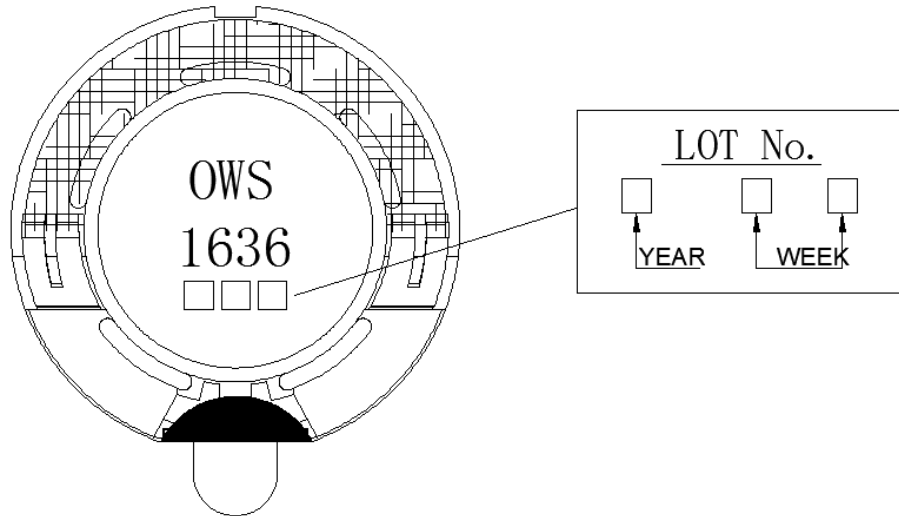
Unless otherwise specified,tolerance: ± 0.2 (unit:mm)



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12.MARKING(Fig.6)

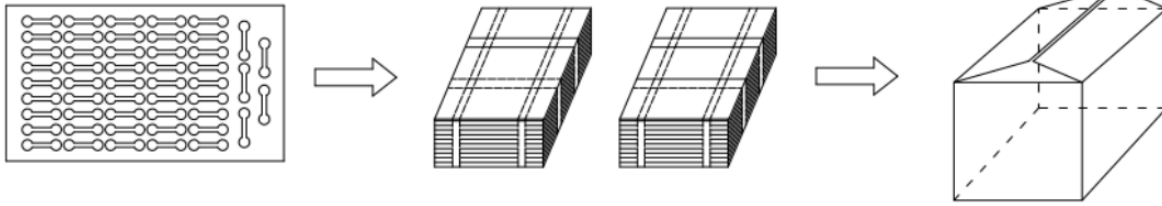


YEAR		WEEK	
year	marking	week	marking
2015	5	1	01
2016	6	2	02
2017	7	3	03
2018	8	4	04
2019	9	5	05
2020	0	↓	↓
2021	1		
2022	2		
		50	50
		51	51
		52	52
		53	53

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13.PACKING(Fig. 7)



Pearl wool (put 100 pcs)
Size: 42.0cm27.0cm1.45cm

QTY: 1. 8Kpcs (0. 9Kpcs+0. 9Kpcs)
Size: (42cm27cm13. 35cm)×2

Carton: 1. 8Kpcs
Size:43.7cm28.5cm27.5cm

Packaging guide:

1. put 100pcs speaker in one piece of pearl wool
2. put packaging of pearl wool into carton with total 1800pcs speaker.
sealed with scotch tape.
3. Stick label with model, QTY, weight etc....

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