

SPECIFICATION

FOR

APPROVAL

Customer : _____

Description : _____ Speaker _____

Universal Model No. : UGSM23A _____

Customer's Model No. : _____

ISSUE	CHECK	APPROVAL	CUSTOMER
Tan Qianfeng 12/11/09	Wu Ting 12/11/09	Tang Helin 12/11/09	



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1. ELECTRICAL AND ACOUSTICAL SPECIFICATION

	Item	Specifications
1-1	Dimension	$\phi 22.5 \times 8.5t$
1-2	Rated Input Power	0.08W
1-3	Max Input Power	0.15W
1-4	Rated Impedance	$8 \pm 15\% \Omega / 2\text{KHz}/1\text{V}$
1-5	Resonance Frequency(f_0)	$1500 \pm 20\% \text{ Hz}/1\text{V}$
1-6	Sound Pressure Level	$\geq 73 \text{ dB}$ at 1.0 KHz 0.1W/0.1m baffleboard (IEC)
1-7	Frequency Range	700HZ ~ 4KHz
1-8	Total Harmonic Distortion	10%MAX. at 2.4KHz, 0.08W
1-9	Flux Density	T
1-10	Polarity	When a positive DC Current is applied to the voice coil terminal marked +or red ,the diaphragm shall move forward
1-11	OperationTest	Must be normal at sine wave and program source 0.08W.
1-12	Buzz,Rattle,etc.	Should not be audible at 0.8 V sine wave between (FO Hz ~ 4kHz)
1-13	Weight	5 g
1-14	Voice Coil Diameter	$\phi 7.2 \text{ mm}$
1-15	Magnet (NdFeB)	$\phi 6.5 \times 1.5t \text{ mm}$
1-16	Appearance	Should not exist any obstacle to be harmful to normal operation;damages,cracks,rusts and distortions,etc.
1-17	Operating Temp. Range	$-20^\circ\text{C} \sim +85^\circ\text{C}$
1-18	Storging Temp. Range	$-40^\circ\text{C} \sim +90^\circ\text{C}$

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2.ENVIRONMENTAL TEST

	Item	Specifications
2-1	High temp. Test	Keep 4 hours at $+90^{\circ}\text{C} \pm 3^{\circ}\text{C}$ and leave 3 hours in normal temperature and then check
2-2	Low temp. Test	Keep 4 hours at $-40^{\circ}\text{C} \pm 3^{\circ}\text{C}$ and leave 3 hours in normal temperature and then check
2-3	Humidity test	Keep 4 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.
2-4	Thermal cycle test.	Low temperature: $-40^{\circ}\text{C} \pm 3^{\circ}\text{C}$, temperature: $+90^{\circ}\text{C} \pm 3^{\circ}\text{C}$, cycle: 1 hour/cycle each, and then keep 5 cycles in a room.

PASS CRITERION :

After these test , the change of S.P.L shall be within ± 3 dB .

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3.MEASURING METHOD(SPEAKER MODE)

3-1 .Test Condition

STANDARD

Temperature : 15 ~ 35℃

Relative humidity : 45% ~ 85%,

Atmospheric pressure : 860mbar to 1060mbar.

JUDGEMENT

Temperature : 20±3℃

Relative humidity : 60% ~ 70%,

Atmospheric pressure : 860mbar to 1060mbar

3-2 . Standard Test Fixture

1.Input Power : 0.1W(0.89V)

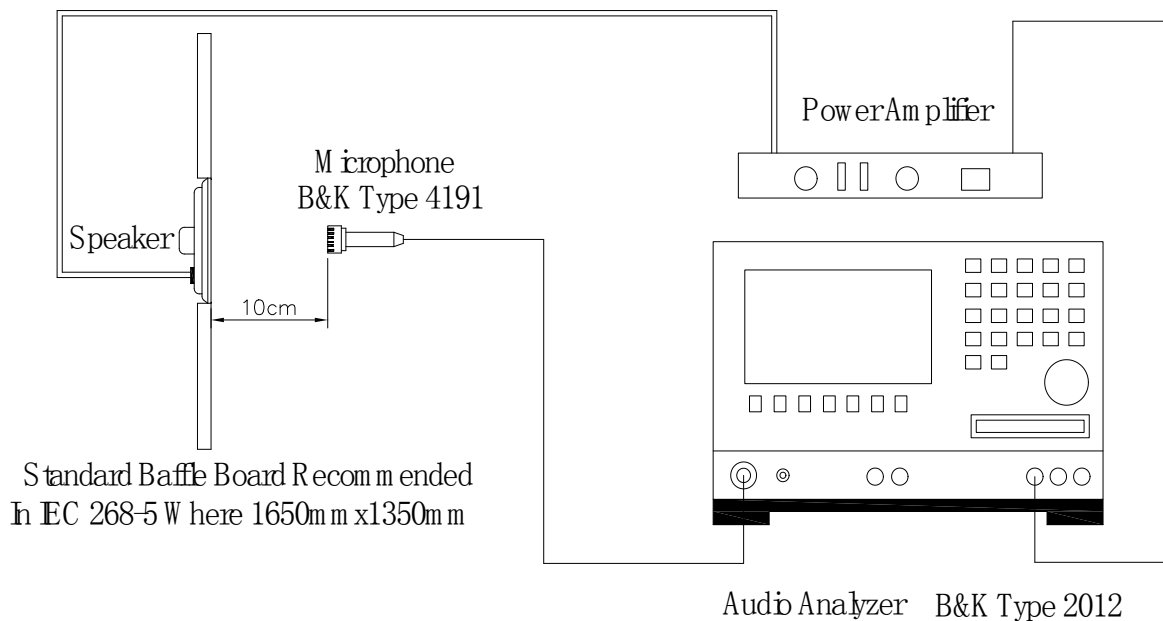
2.Zero Level : -dB

3.Mode : TSR

4.potentiometer Range : 50dB

5.Sweep Time : 0.5sec

Standard test condition of speaker



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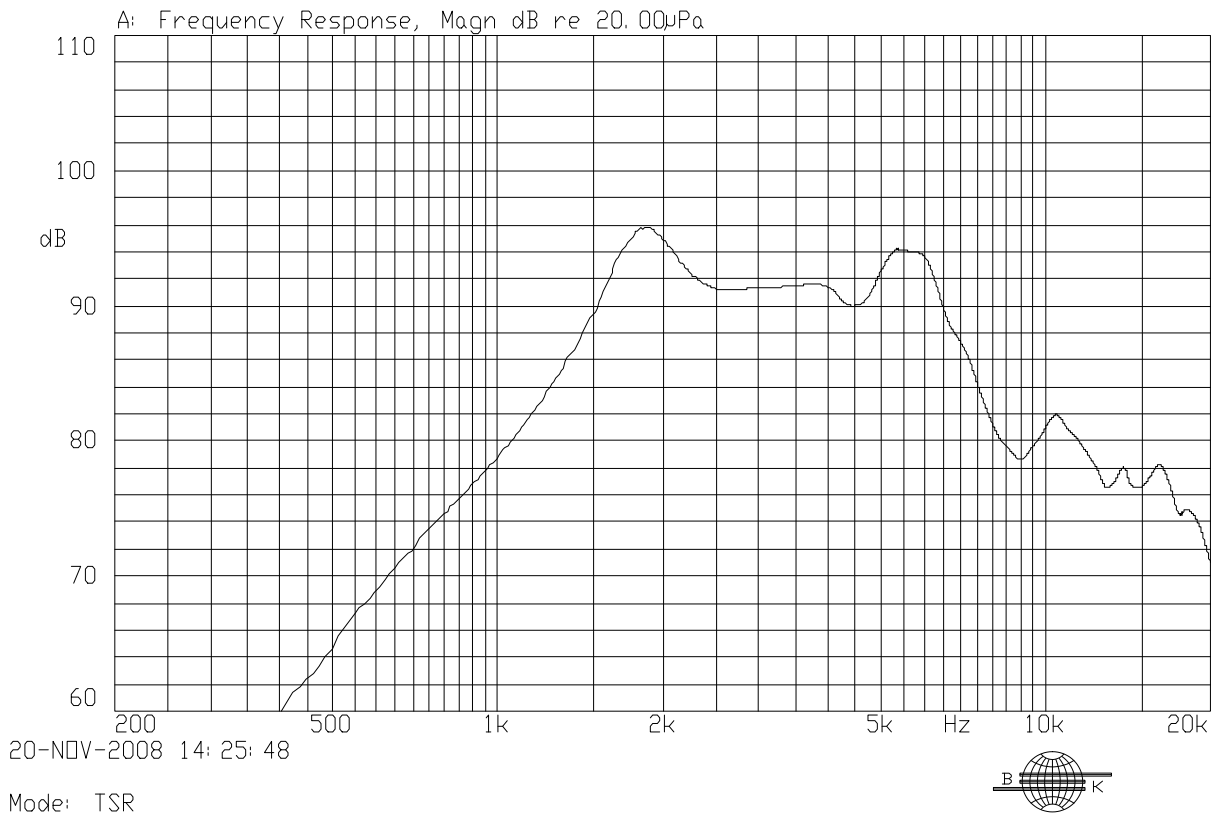
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4.FREQUENCY RESPONSE CURVE

UGSM23A 0.1m 0.1W 0.89V



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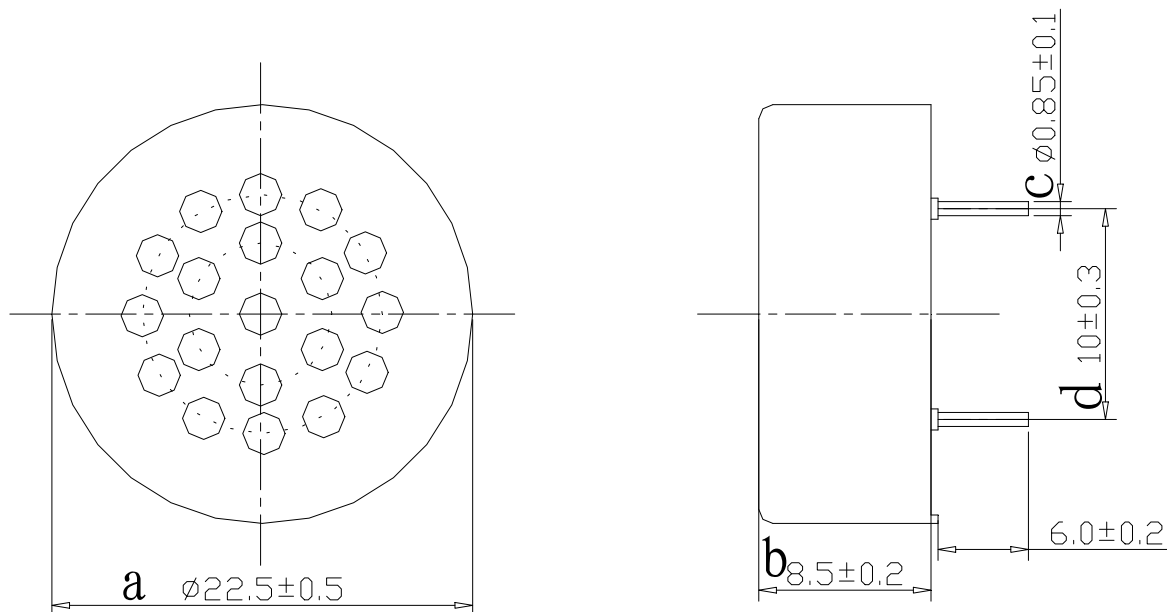
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5.DIMENSIONS

Unless otherwise specified, tolerance: ± 0.3 (unit:mm)



9	Housing	1	Noryl	GU-001
8	Pin	2		GU-001
7	Front cover	1		GU-001
6	PCB	1		GU-001
5	Magnet	1		GU-001
4	Plate	1		GU-001
3	Voice coil	1		GU-001
2	Diaphragm	1		GU-001
1	Frame	1	Plastic+SPCC	GU-001
The material must be meet to GU-001				
PART NO.	PART NAME	Q'TY	MATERIAL	REMARK

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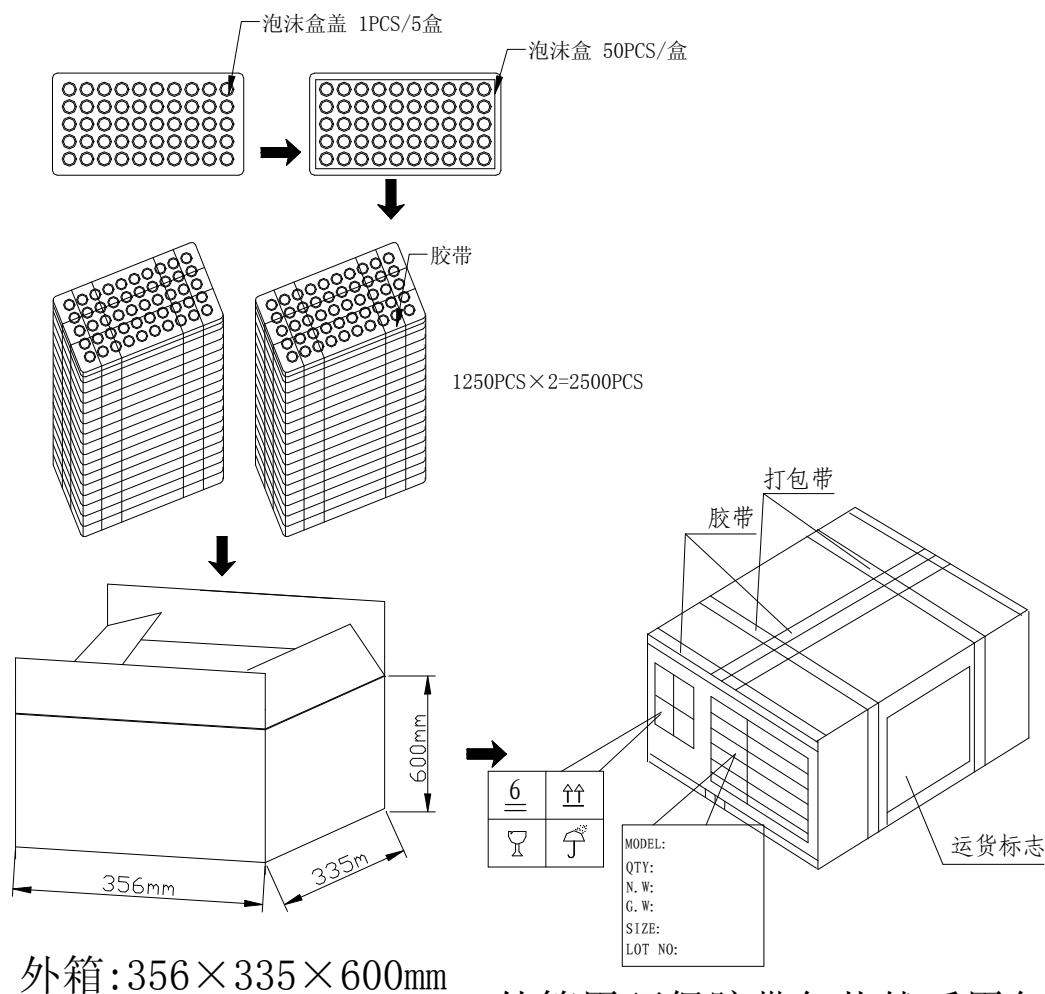
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6.PACKING



外箱: 356 × 335 × 600mm

外箱用环保胶带包扎然后用包装带作平行包扎, 一箱装好后根据要求填写内容.

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