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	DK	MODEL NAME: OWR-06944T-16B		Rev 8	

SPECIFICATION FOR APPROVAL

Dynamic Speaker


Model Name	OWR-06944T-16B
Note	RoHS and HF Compliant

<p>APPROVED BY:</p>  <p>2013.09.12</p> <p>Customer name / Stamp / sign / date</p>

REVISION NOTES:

Date	revision	Description of Revision
2010-10-20	A	
2010-10-27	B	3M adhesive D9495
2010-11-25	C	Blue adhesive mark / Update THD limit / Dir 6.0mm +0.2/-0.1 tolerance
2011-6-27	D	3M adhesive D9629FL
2013-07-11	E	RoHS and HF Compliant
2013-07-11	F	Update weight information

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1. SCOPE

THIS SPECIFICATION IS APPLIED FOR RECEIVER UNIT FOR A HEADSET.

2. TEST CONDITIONS

TEMPERATURE : 18° ~ 22°C

HUMIDITY : 60° ~ 70°C (R.H.)

ATMOSPHERE : 860 ~ 1060 hPa

3. GENERAL REQUIREMENTS

OPERATING TEMPERATURE RANGE : -20° ~ 55°C

STORAGE TEMPERATURE RANGE : -25° ~ 60°C

4. MECHANICAL LAYOUT & DIMENSIONS


DIMENSIONS : SHOWN IN FIGURE 4.

UNIT WEIGHT : 0.6g +/-0.1g

5. ELECTRICAL AND ACOUSTICAL CHARACTERISTICS

1.	IMPEDANCE	16 Ω ± 15% (at 126mV 1KHz)
2.	SOUND PRESSURE LEVEL	98.8 dB ± 3 dB At 1mW/2CC Coupler @ 1KHz
2.A	SPL - SPECIAL SORTING (dot marking : positive polarity)	Group A: 101.8 ~ 100.3dB dot marking = Purple Group B: 100.29~ 98.8dB dot marking = Blue Group C: 98.79 ~ 97.3 dB dot marking = Red Group D: 97.29 ~ 95.8 dB dot marking = Black
3.	RESONANCE FREQUENCY	3100Hz ± 15%
4.	FREQUENCY RANGE	20Hz ~ 20 KHz. Figure 2.
5.	RATED INPUT POWER	(Nominal ./Maximum) : 5mW / 10mW , 0.28V / 0.4V
6.	DISTORTION	Please see below under point : FREQUENCY RESPONSE & THD CURVES (FIG. 2)

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7.	BUZZ AND RATTLES	MUST BE NORMAL SINE WAVE FROM 50Hz TO 10kHz. Rated input power 5mW,0.28V Hearing test. Speaker in vertical position. Free air.
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6 QUALIFICATION TESTS

-	AFTER TEST Sensitivity difference at 1.0 KHz shall be with ± 3 dB from initial value.
-	LOAD TEST Signal test : White noise Power test : 5m W (0.28V) Duration : 96 Hrs
-	HIGH TEMPERATURE TEST High temperature : $55^{\circ}\text{C} \pm 3^{\circ}\text{C}$ Duration : 96 Hours then left 6 hours in a room
-	LOW TEMPERATURE TEST Low temperature : $-20^{\circ}\text{C} \pm 3^{\circ}\text{C}$ Duration : 96 Hours then left 6 hours in a room
-	HUMIDITY TEST Temperature : $40 \pm 2^{\circ}\text{C}$ Humidity : 90 % (R.H.) Duration : 96 Hours then left 6 hours in a room
-	VIBRATION TEST Vibration : 10 ~ 55 Hz / min Amplitude : 1.5 mm Duration : 1 hour each plan
-	DROP TEST Height : 1m Drop face : Hardwood Floor Duration : 10 cycles
-	TEMPERATURE CYCLE TEST Temperature : $-20^{\circ}\text{C} \pm 2^{\circ}\text{C}$ (2 hours) \leftrightarrow $+ 55^{\circ}\text{C} \pm 2^{\circ}\text{C}$ (2 hours) Cycles : 5 cycles
	Maximum power test 10 mWatts (at least 10 minutes without damage but not guarantee for no rattling)

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7 MEASUREMENT METHOD FOR DYMANIC SPEAKER (FIG. 1)

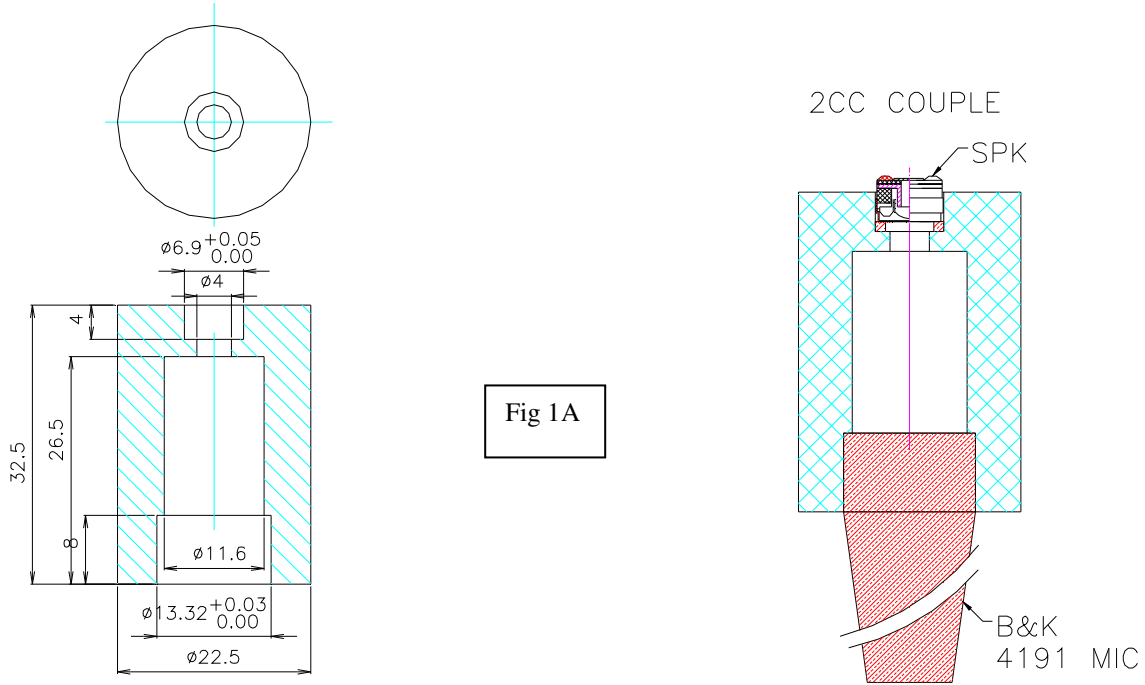


Fig 1A

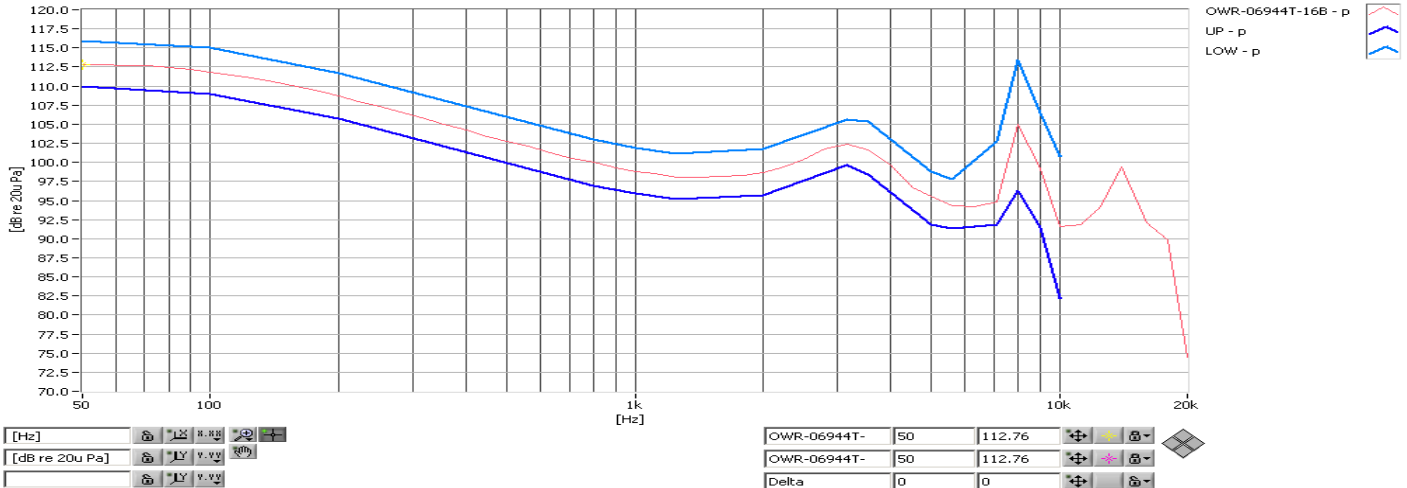
NO	EQUIPMENT	REMARKS
1.	TEST JIG	FIG. 1A
2.	MICROPHONE	½ INCH Microphone
3.	MICROPHONE HOLDER	
4.	DAMPING MATERIAL	FOAM RUBBER
5.	BOX	
6.	Test distance measured from front of speaker frame to front of test microphone	2CC Coupler

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8. FREQUENCY RESPONSE & THD CURVES (FIG. 2)

XY Graph 1



Frequency	50	80	100	315	500	800	1K	2K	Hz
Upper Limits	116.79	116.65	114.64	108.83	105.77	103	101.8	102.29	dB
Lower Limits	108.19	108.05	108.64	102.33	99.27	96.5	95.8	95.29	dB
delta +/-	4.3	4.3	3	3.25	3.25	3.25	3	3.5	dB

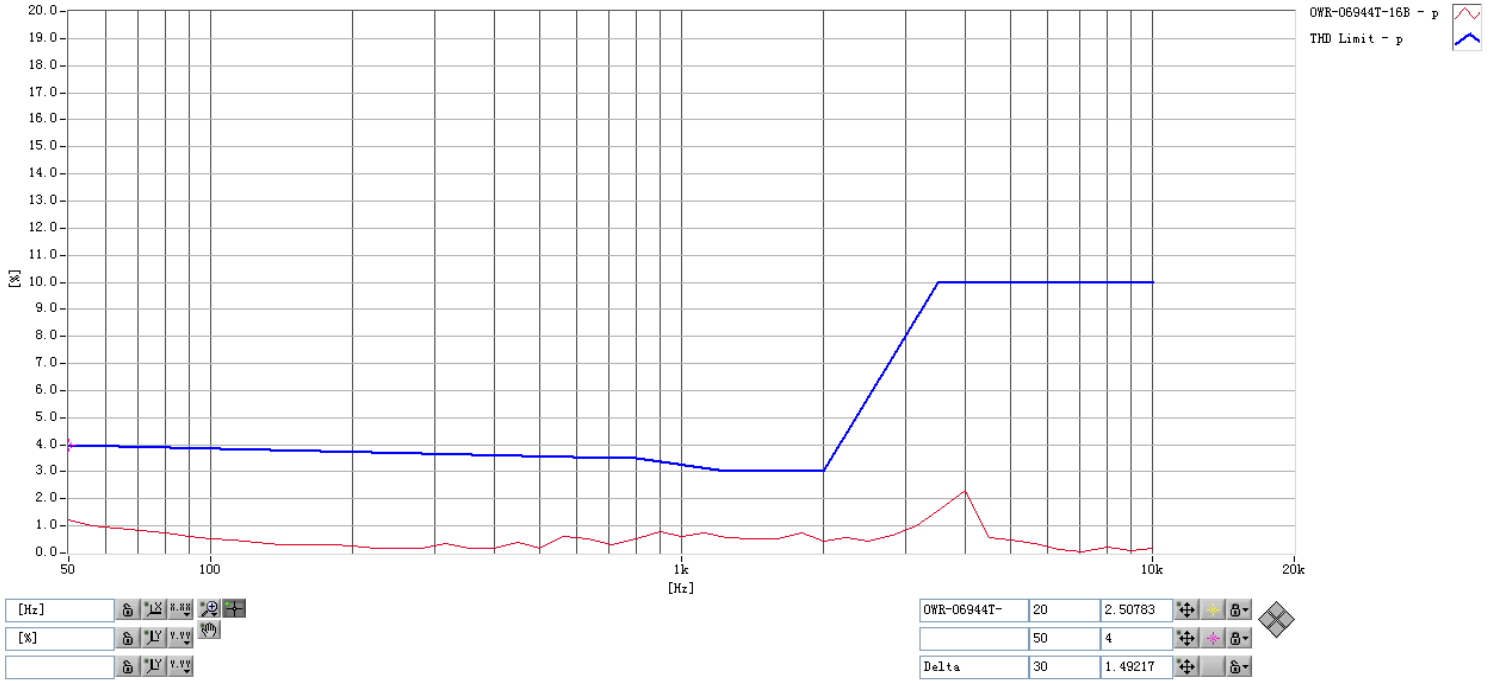
Frequenc	3.15K	3.55k	4K	5K	6.3K	7.1K	10K	Hz
Upper Limits	106.54	105.72	103.4	98.85	97.19	101.02	99.65	dB
Lower Limits	98.54	97.72	95.4	91.85	91.19	89.02	83.65	dB
delta +/-	4	4.0	4.0	3.5	3	6	8	dB

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XY Graph 1

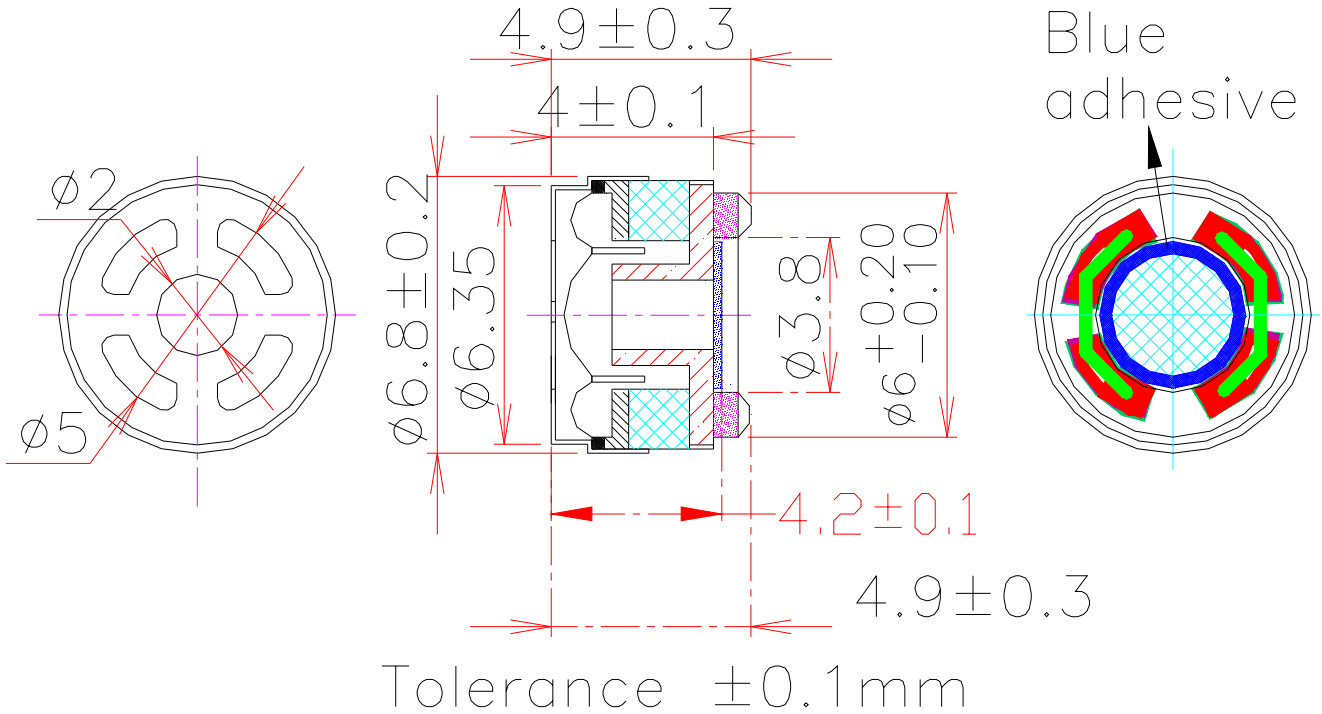


Freq	50	750	800	1.2K	1.25K	2K	3.5K	9.5K	10K
THD	4%	3.5%	3.5%	3.5%	3%	3%	10%	10%	10%

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9. DIMENSIONS (FIG. 3)



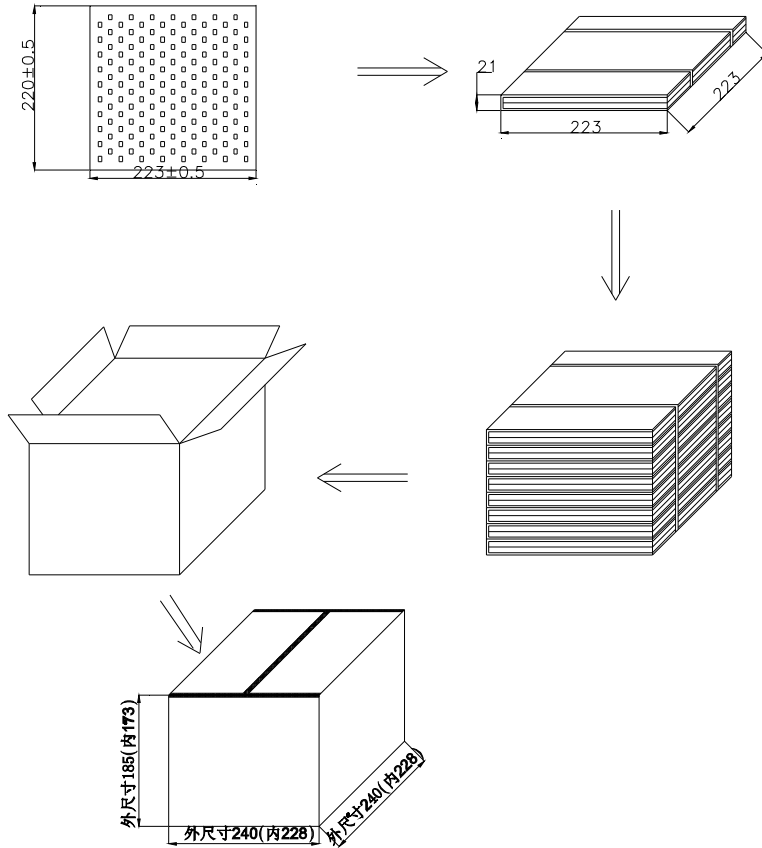
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10. PACKAGING

PACKAGING

1. Foam tray: 220 x 220 x 18mm
150 pcs per layer--- 10 layers/Box
2. Box : 230 x 230 x 205 mm
Total: 1500pcs/ Carton box
3. Paper board: 220 x 220 x 3mm



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