Headphone speaker

Ø5.8x4.3 mm

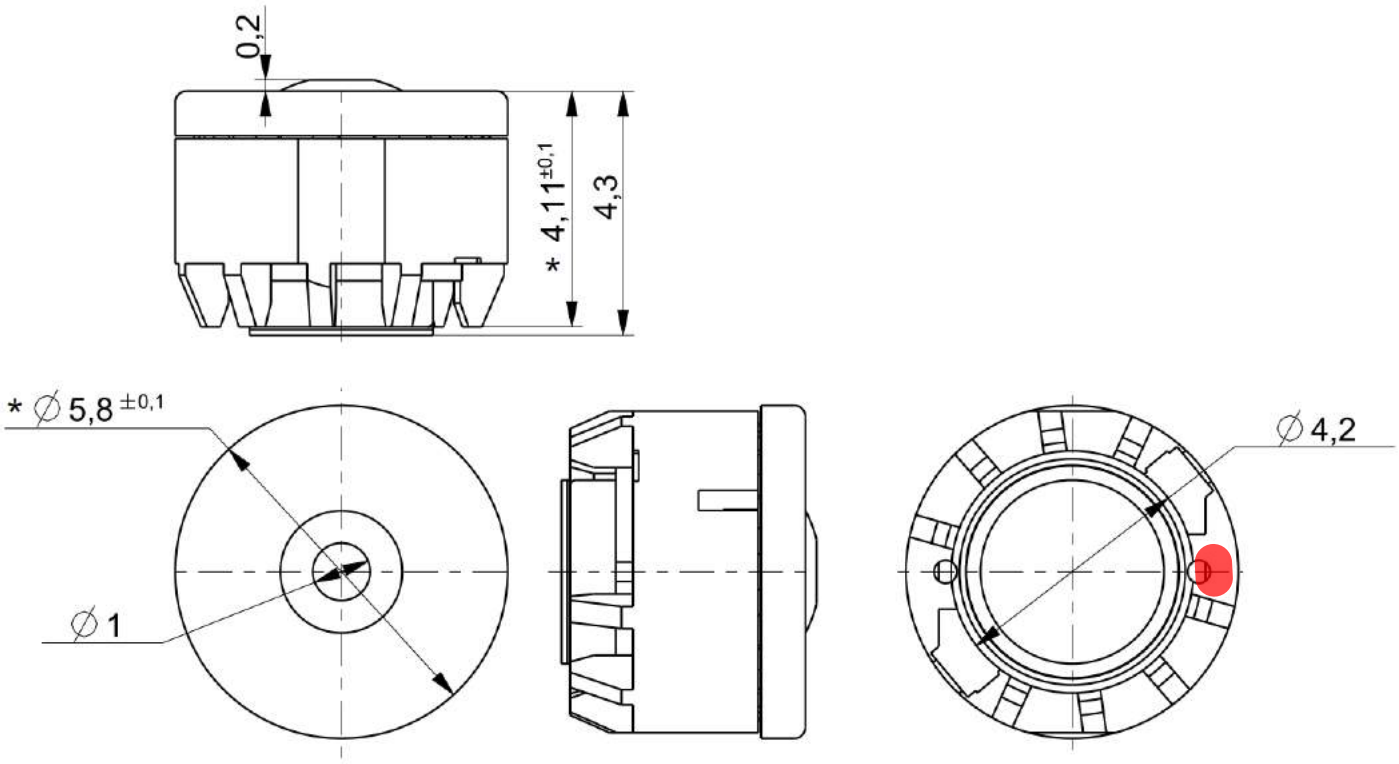
TC058S043YN16

Revision

Date	Version	Status	Changes	Approver
2018/10/17	V0.1	Draft	First release	AX

1. Mechanical Characteristics

1.1. Mechanical Drawing



Key dimension which has symbol *

1.2. Material List

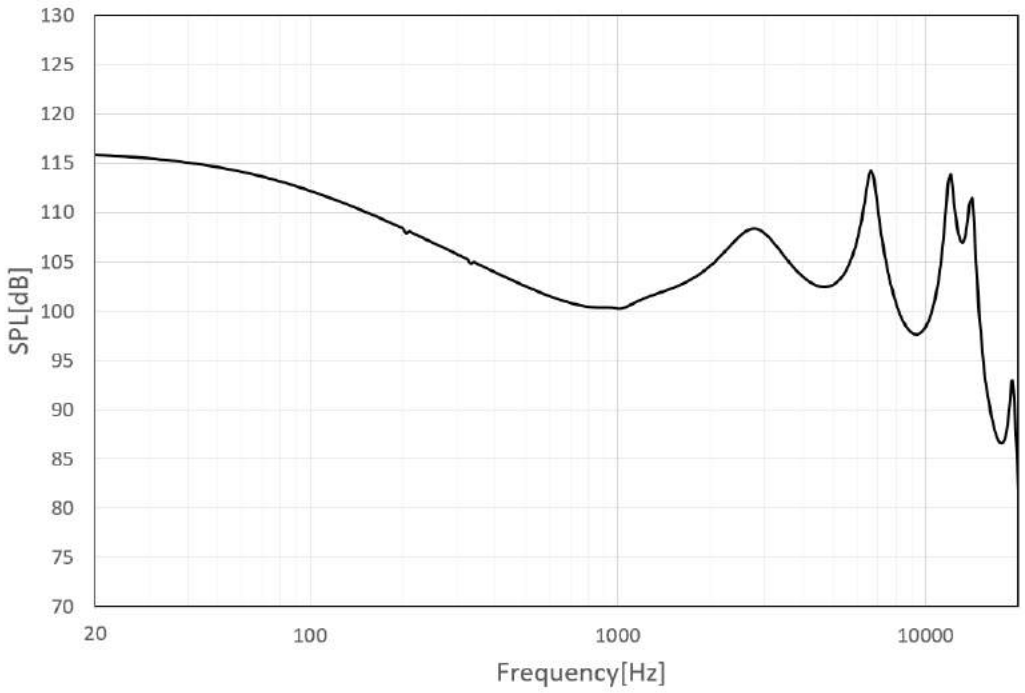
1）	Basket	PC
2）	Membrane	PET Compound
3）	Magnet	Ne-Fe-B
4）	Weight	0.35g
5）	Voice Coil	Copper
6）	Yoke and Pot	Fe
7）	Mesh	Nylon

2. Electro-Acoustic Characteristics

2.1. Frequency Response

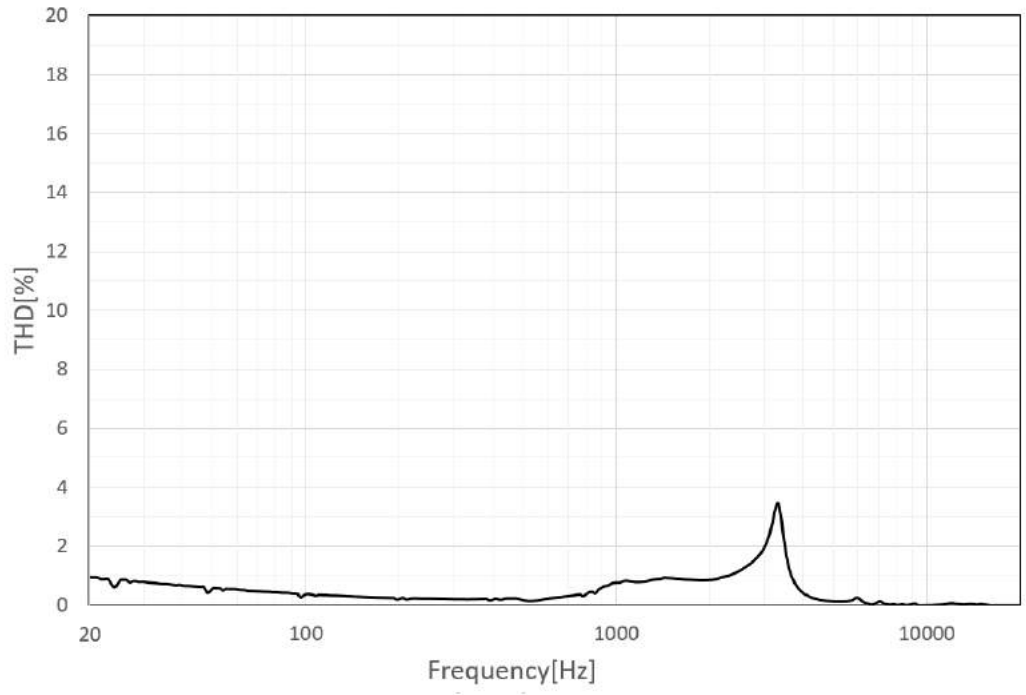
Typical frequency response

measured on IEC711 with adapter at 0.179Vrms



Typical Total Harmonic Distortion

measured on IEC711 with adapter at 0.179Vrms



2.2. Electro-acoustic Parameters

Receiver mounted in adapter according to 2.6 measured on adapter according to 2.4.

1. Rated impedance	Z:	16Ω
2. Voice coil resistance	R_{dc}:	15Ω±10%
3. Nominal characteristic sensitivity (measured at 0.179V on IEC711)		101dB ± 3dB
at the frequency points:		1kHz
5. Rated Frequency Range		20~20kHz ± 10dB

6. THD less than 1% at 1kHz, measured at 0.179V

7. Polarity: When Positive current is supplied from the headphone driver terminal marked (red dot),and a negative to the other terminal the diaphragm must move toward the front.

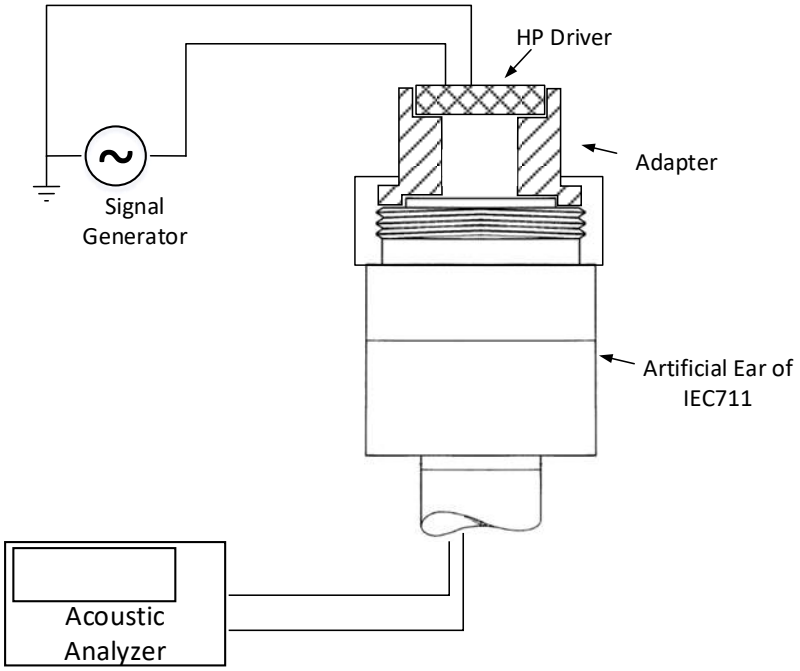
All acoustic measurements at 23±3°C。

2.3. Power Handling

Headphone Driver in open condition (Mesh on back, open front)

1. Rated Input Power (Broadband noise, 96h)	10mW (RMS)
2. Max Short Perm Power(1sec. ON/ 60sec. OFF)	20mW (RMS)

2.4. Measurement Setup(Acoustic)



2.5. Measured Parameters

2.5.1. Sensitivity

SPL is expressed in dB ref 20μPa, computed according to IEC 60268-7

Measurement set up according to chapter 2.4

This test is performed for 100% of products in the production line

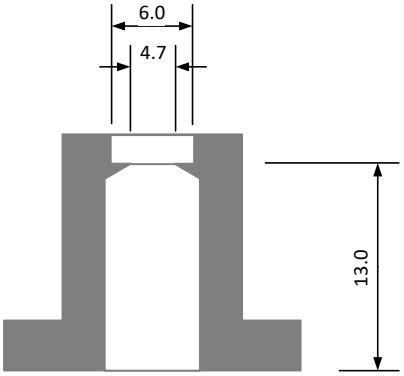
2.5.2. Total Harmonic Distortion (THD)

Total harmonic distortion (THD) is measured according to IEC 60268-7 (2nd to 5th harmonics) and checked against the limit defined in chapter 2.2.6.

2.5.3. Rub& Buzz

50-3kHz at 0.4Vrms open back cavity with mesh will not result in any buzzing or extraneous sound.

2.6. Acoustic Measurement Adapter



3. Environmental Tests

Immediately after reliability test, samples should be stored under climatic conditions such as normally exist in ordinary rooms. Unless otherwise noted, the recovery period should be 2 hours at least before performance test.
All samples after environmental test should meet the requirements specified in chapter 2.2.3, 2.2.4 and 2.4.3 with tolerance increasing by 50%.

3.1. Long Term Operation Test

Broadband noise, duration 96h, input voltage 0.4Vrms, open back cavity with mesh

3.2. Low Temperature Storage Test

-25 ±2°C, duration 48h, 2 hours recovery time.

3.3. High Temperature Storage Test

+70±2°C, 20~25% R.H. duration 48h, 2 hours recovery time.

3.4. High Temperature & Humidity Storage Test

+40±2°C, 90~95% R.H. duration 96h, 2 hours recovery time.

3.5. Drop Test

The Speaker Should Be Dropped Along At lot Plate75° Inclined From The Vertical 1m Height And The Magnet Part Should Be Impacted To The Stopper.

