



Dynamic receiver With spring & HAC

15.0 × 6.0 × 2.5 mm

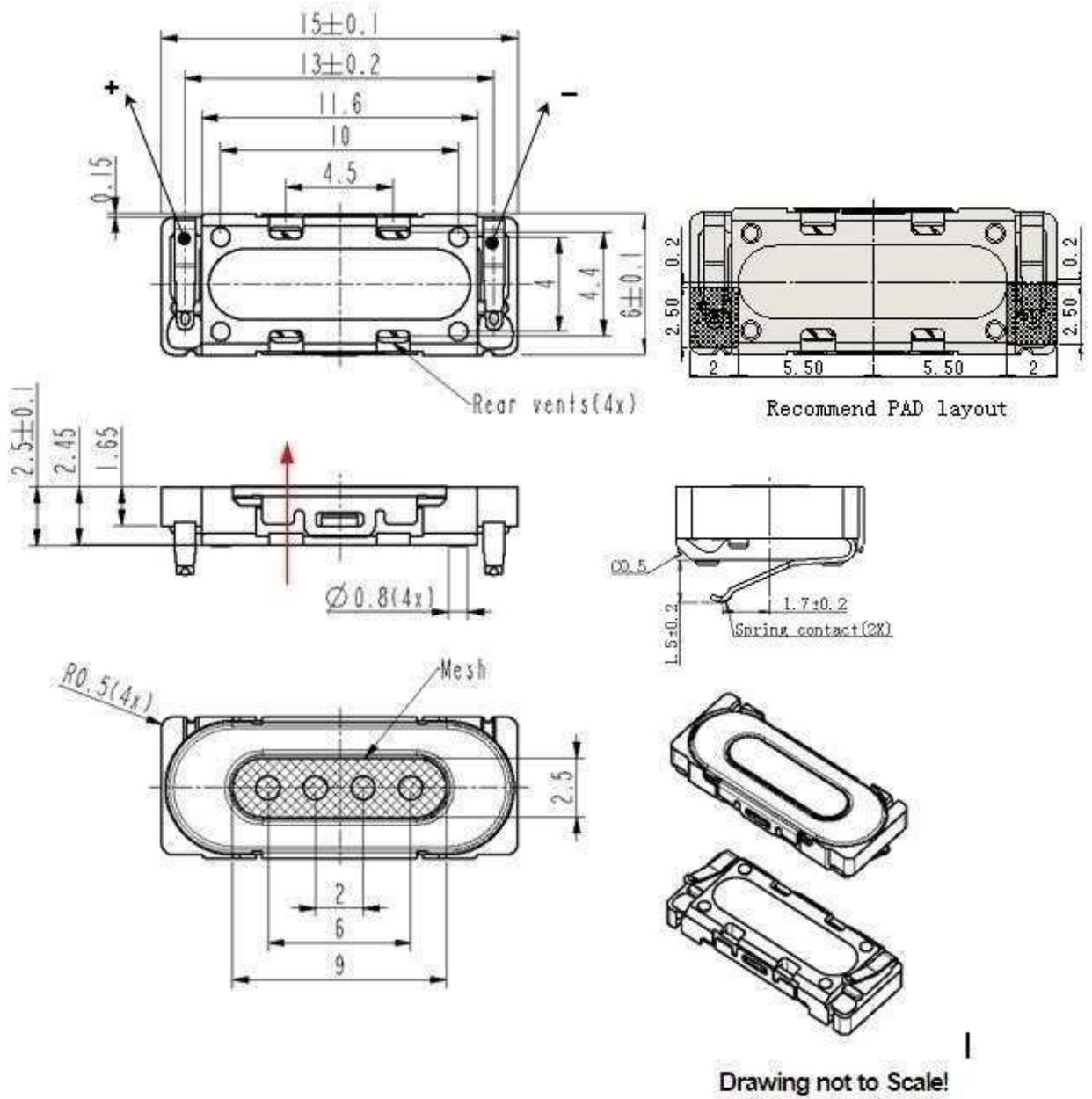
BR1506L025YN16M

Revision

Date	Version	Status	Changes	Approver
2019/12/18	V0.1	Draft	Initial release	AX
2020/2/20	V0.2	Draft	Add spring size	AX
2020/8/10	V0.3	Draft	Update date code marking	AX

1. Mechanical Characteristics

1.1. Mechanical Drawing

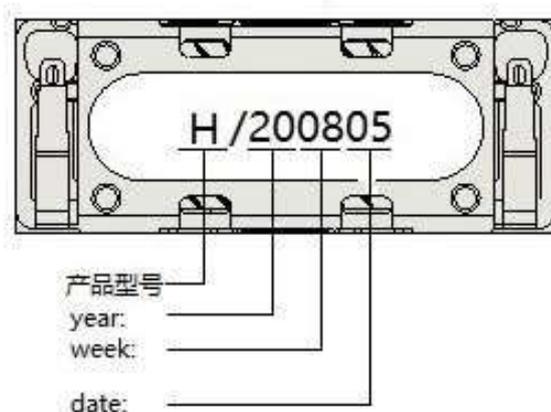


Positive voltage on pad '+' moves membrane in direction of red arrow!

1.2. Material List

- | | | |
|----|-----------|--------------------|
| 1) | Basket | PPA |
| 2) | Membrane | PEN |
| 3) | Cover | CrNi steel |
| 4) | Pot | Soft magnetic iron |
| 5) | Magnet | Nd-Fe-B |
| 6) | Top plate | Soft magnetic iron |
| 7) | Spring | CrNi steel |
| 8) | Dimension | 06X15X2.5mm |
| 9) | Weight | 0.5g |

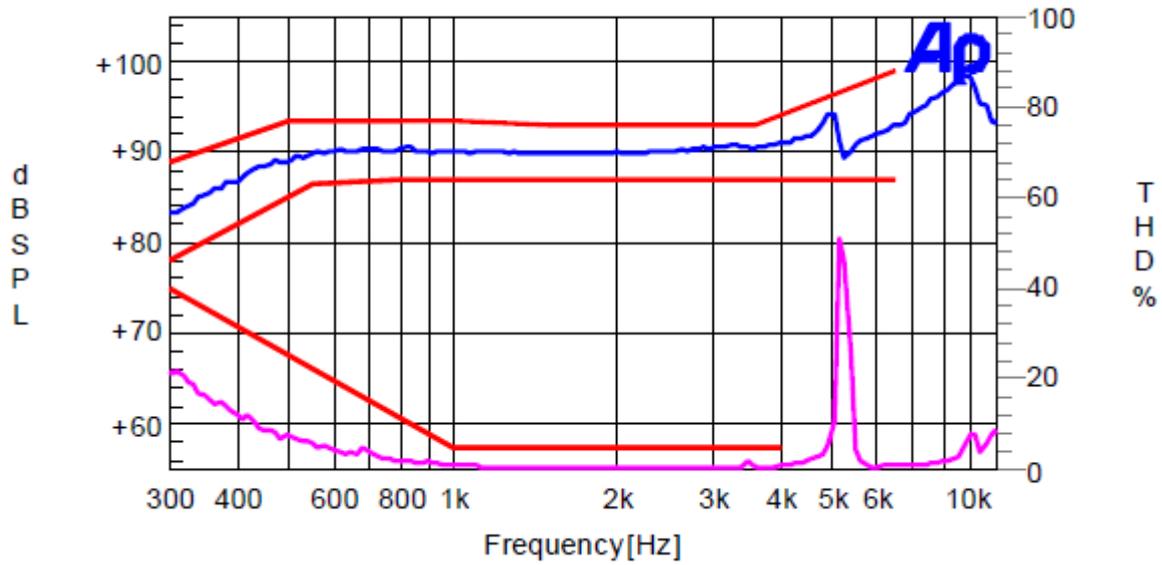
1.3. Part Marking/Labeling



2. Electro-Acoustic Characteristics

2.1. Frequency Response

Typical frequency response measured according to chapter 2.4
(Baffle at 10mw, in 1cm distance)



f(Hz)	SPL [dB] Lower limit	f(Hz)	SPL [dB] Upper limit	f(Hz)	THD [%] upper limit
300	78	300	89	300	40
550	86.5	500	93.5	1000	5
800	87	1000	93.5	4000	5
6500	87	1500	93		
		3600	93		
		6500	99		

2.2. Electro-Acoustic Parameters

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

1. Rated impedance Z: 16Ω
2. Voice coil resistance R: 28.8Ω ± 10 %
- 2.1 ADDITIONAL COIL RESISTANCE R: 35.9Ω± 10 %
3. Resonance frequency F₀: 450Hz ± 15%
(measured at 566mVrms, in free air)
4. Measured characteristic sensitivity 90 ± 3dB
(measured at 10mw 1cm baffle 2kHz to 3kHz average value)

5. THD according to chapter 2.1

All acoustic measurements at $23\pm 3^{\circ}\text{C}$

2.3. Power Handling

Receiver mounted in life time test device (open rear/open front)

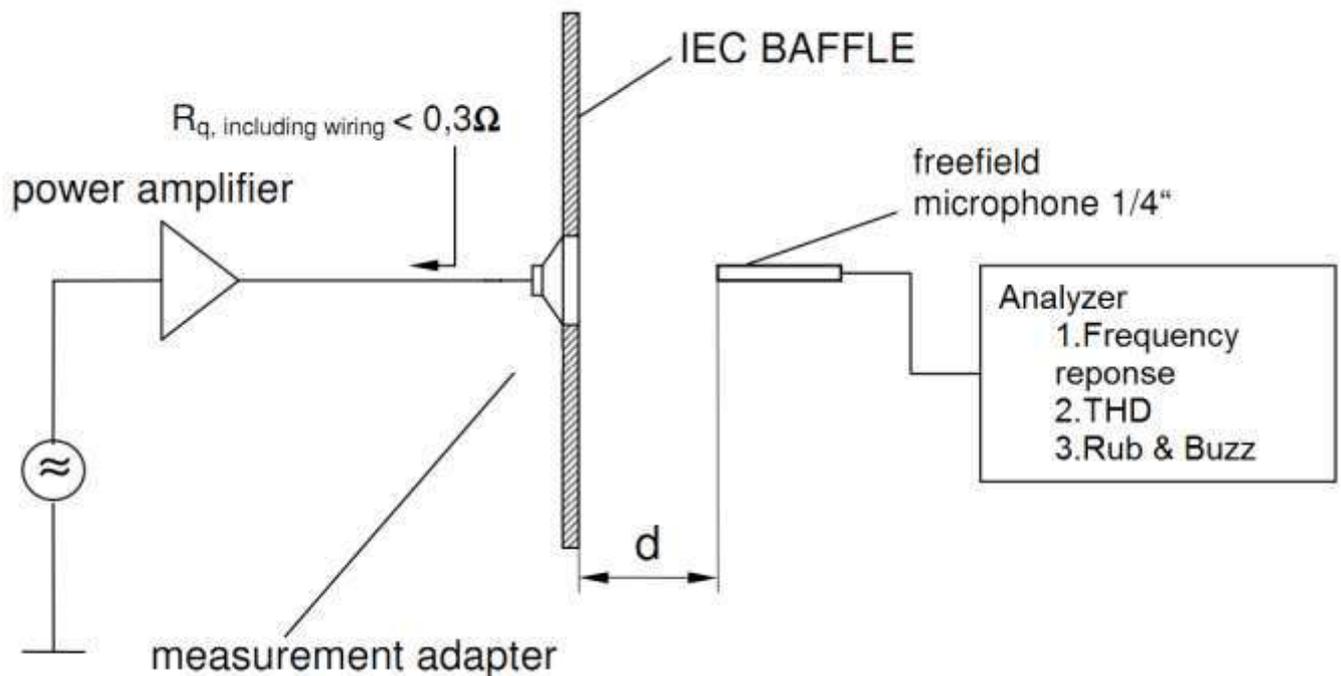
1. MAX.SHORT TERM POWER (1sec. ON / 60sec. OFF) 1.265Vrms (50mW)

(pink noise with band-pass 12dB/Oct. at 200Hz and 4000Hz, crest factor 2)

2. MAX. CONTINUOUS POWER (168h) 0.8Vrms (20mW)

(pink noise with band-pass 12dB/Oct. at 200Hz and 4000Hz, crest factor 2)

2.4. Measurement Setup (Acoustics)



2.5. Measured Parameters

2.5.1. Sensitivity

Unless specified, SPL is expressed in dB ref 20uPa, computed according to IEC 268-5

Measurement set up according to chapter 2.4

2.5.2. Frequency Response

Frequency response is measured according to test set up in chapter 2.4 and checked against the tolerance window defined in chapter 2.1.

2.5.3. Total Harmonic Distortion (THD)

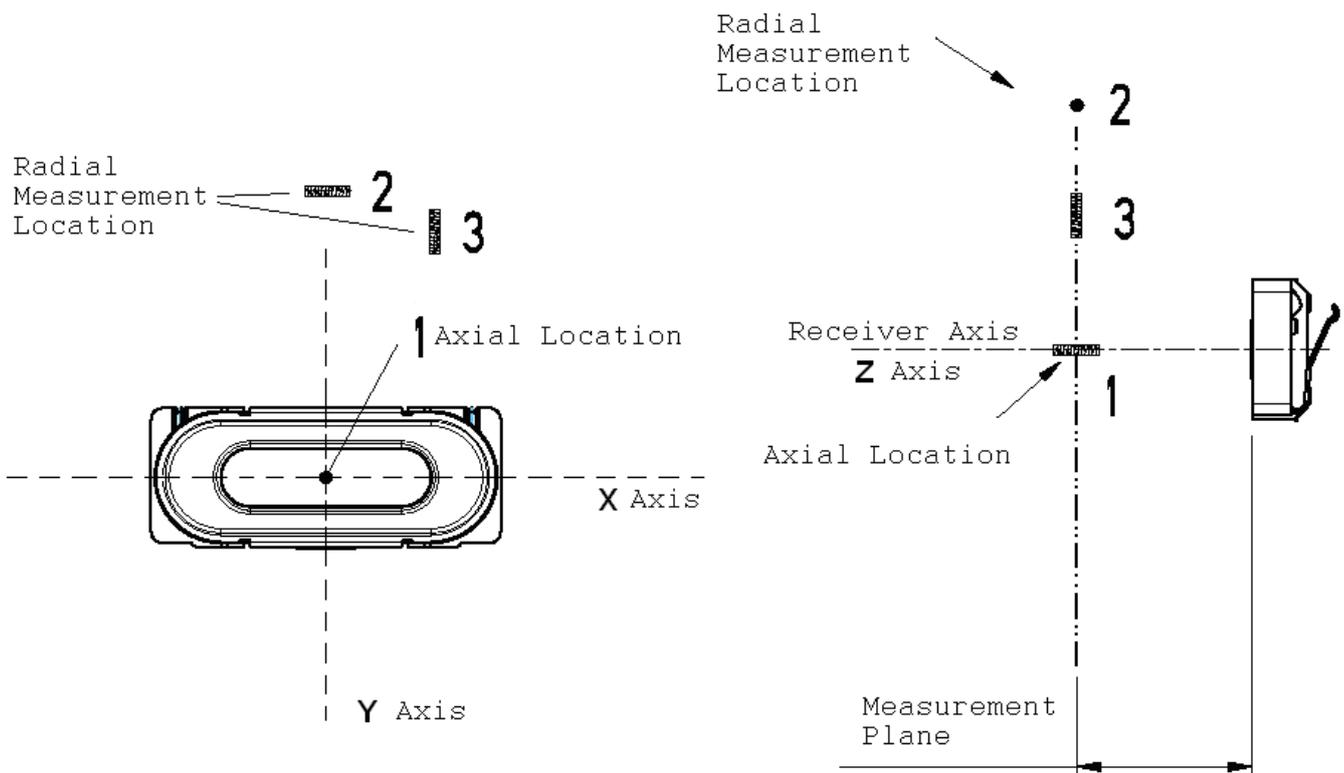
Total harmonic distortion (THD) is measured according to IEC 268-5 (2nd to 5th harmonics) and test set up in chapter 2.4 and checked against the tolerance window defined in chapter 2.1.

2.5.4. Rub& Buzz

300-7000Hz at 566mVrms for a period of 1 second will not result in any buzzing or extraneous sound.

2.6. Measurement setup for Hearing Aid

Tests are conducted at Z (Axial) direction, X and Y (Radial) directions
Measurement Positions acc. to ANSI C63.19-2007



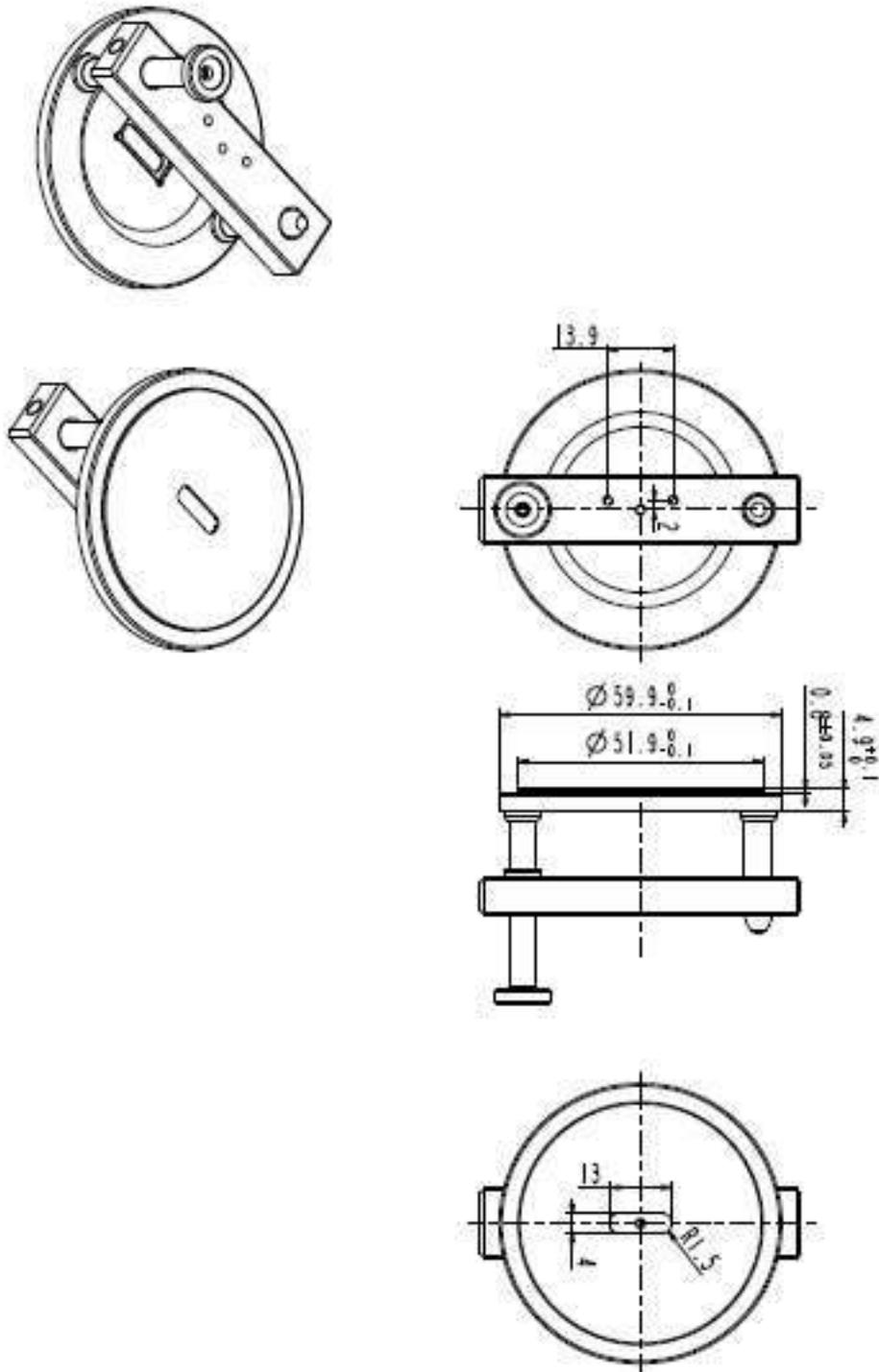
Axial (position 1): maximum value of Z direction

Radial X (position 2): maximum value of X direction

Radial Y (position 3): maximum value of Y direction, the difference between Radial X and Y is within 1dB

Receiver must be mounted on a **plastic surface, magnetic ambient levels be low as to not significantly affect the measurement, magnetic shielded chamber would be better.*

2.7. Acoustic measurement Adapter



2.8. Weight

Transducers per tray	70pc
Transducers per box	1820pc
Max. boxes per pallet	48pc
Transducers per max. packing quantity	87360pc
Transducer net weight	0.5g
Net weight per box	0.91kg
Gross weight per box	3kg
Net weight max. packing quantity	40.3kg
Gross weight max. packing quantity (incl. pallet)	158.8kg

3. Environmental Tests

20pcs products for each environmental test.

Immediately after reliability test, products should be stored under room. Unless otherwise noted, the recovery period should be 2 hours at least before performance test.

All products after environmental test should meet the requirements specified in chapter 2.1 and 2.2 with 50% widened tolerances.

3.1. Low Temperature Storage Test

Ref. EN 60068-2-1, $-40 \pm 2^{\circ}\text{C}$, duration 168h, 2 hours recovery time.

3.2. High Temperature Storage Test

Ref. EN 60068-2-2, $+85 \pm 2^{\circ}\text{C}$, duration 168h, 2 hours recovery time.

3.3. Long Term Operation Test

Ref. IEC60068-2-2. 168h. Open rear/Open front 20mW Signal according to part 2 in chapter 2.3.

3.4. Short Term Maximum Power Test

60 cycles. Open rear/Open front 50mW Signal according to part 1 in Chapter 2.3.

4. Related Documents

Refer to general terms.

5. Legal Information

Refer to general terms.