

## Ultrasonic Piezoelectric Atomizing Transducer Specification



产品专利号: ZL200420043994.7; ZL201020620593.9; ZL201120283778.X  
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AUDIOWELL are producing ultrasonic piezoelectric atomizing transducers of compact and higher performances. Our specially electrode protection layer of the transducer is far superior to Nickel or Titanium electrode used in traditional transducers, it has more advantages in withstanding acid, alkaline and cavitation corrosion, so it features higher strength, less water scale, and longer lifetime.

■ **Model:** HL0020-004//AW8Y16083M2L113J32Z

■ **Part Numbering:**

EX. **AW** **8** **Y** **16** **083** **M** **2** **L113** **J32** **Z**  
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

- ① Audiowell
- ② Ceramic material code
- ③ Electrode material code: Y,N,J.....
- ④ Diameter of element (mm)
- ⑤ Thickness of element (10<sup>-2</sup> mm)
- ⑥ Electrode shape: A,B,C,D.....
- ⑦ Coating material code: 1,2,3.....
- ⑧ Different length color or types of wires: L1,L2,L3.....
- ⑨ Different fitting , EX.J3= plastic ring
- ⑩ ROHS code

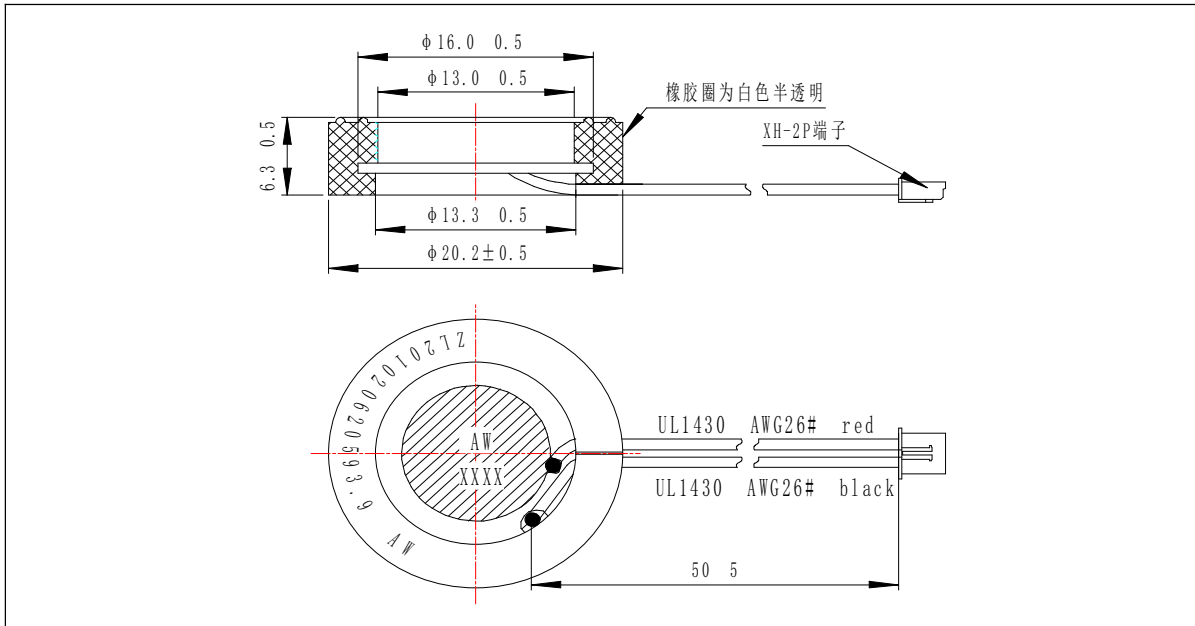
■ **Electrical specification:**

No.	Items	Unit	Standard	Test condition: T=25°C
1	Thick resonant frequency	MHz	2.45±0.1	Agilent 4294A
2	Resonant impedance	Ω	≤2.5	Agilent 4294A
3	Static capacitance	pF	1450±20%	Digital electric bridge At 1000Hz/1V



4	Electrical-mechanical coupling coefficient		≥0.45	Agilent 4294A (Fs3/Fs1 查表值)
5	Life times	Hour	3000	

■ Appearance and dimensions: (Unit: mm)



**Note:**

1. The lead wire, soldering tin, rubber ring all comply with the requirements of environmental protection, while Piezo ceramic exempt from lead restriction.
2. Print "AWXXXX" on the central electrode (XXXX is a four-digit number on behalf of year and month. For example, the printing AW1202 stands for the product on February 2012.).

■ Package:

PCS/CTN	Carton 002 (cm)	Carton 030(Outside Size) (cm)	Gross eight (Kg)	Net Weight (Kg)
2760	15.5*12.5*3.8	35.0*29.0*23.5Y	10.0	8.5

■ Note:

- a) The piezo shall be fastness and smooth.

- b) The piezo shall be cleaned regularly, make sure there's less scale on it.
- c) Please make sure there is no electric potential difference in the water when designing the circuit, otherwise the coating of the piezo might be electrolyzed.
- d) Vp-p of both ends of the piezo shall less than or equal to 100v.
- e) In any case, please do not reweld the solder joint of the piezo personally , so as to avoid damage to the product.
- f) The piezo is fragile, may be damaged by strong vibration or impact. So please install carefully.
- g) When using the piezo, please make sure to have anti-dry protection, so as to avoid product performance recession.
- h) The appropriate working temperature for the piezo is 10-50°C, it is recommended to work above 25°C.

