

# Ultrasonic Piezoelectric Atomizing Transducer

We 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's' corrosion, so it features higher strength, no hard water scale, and longer lifetime.

#### 1、(Name): ARLEX CUSTOMIZED

## 2、(Model): 16Y25120M2L15J3

3、Part Numbering)

| EX. | 16  | Ŷ   | 25  | 120 | Μ   | 2   | L15 | J3  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |

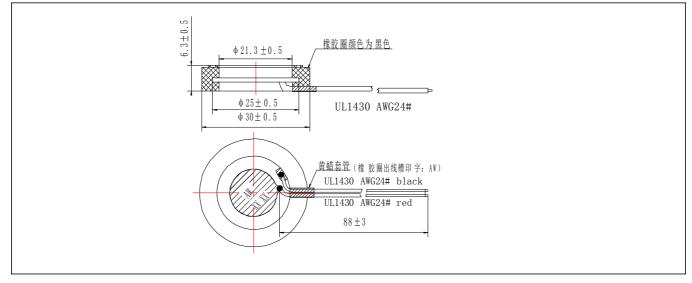
- (1) Ceramic material code
- (2) Y,N,J....=Electrode material code
- (3) Diameter of element (mm)
- (4) Thickness of element  $(10^{-2} \text{ mm})$
- (5) A,B,C,D······=Electrode shape
- (6) 1,2,3······=Coating material code
- (7) L1,L2,L3....=Different length color or types of wires
- (8) Different fitting, EX.J3= plastic ring
- 4、 (Electrical specification):

| Item                                       | Unit | Standard  | (Test condition): T=25℃              |
|--------------------------------------------|------|-----------|--------------------------------------|
|                                            |      |           |                                      |
| (Ft)                                       | MHz  | 1.66±0.05 | Agilen 4294A                         |
| Thick resonant frequency                   |      |           | Ŭ,                                   |
| (R)                                        | Ω    | ≤2.0      | Agilen 4294A                         |
| Resonant impedance                         |      |           | Ŭ,                                   |
| (C <sub>0</sub> )                          | pF   | 1700±20%  | At 1000Hz/1V                         |
| Static capacitance                         | р    |           | Digital electric bridge At 1000Hz/1V |
| (Kt)                                       |      | ≥0.45     | Agilen 4294A (Fs3/Fs1)               |
| Electrical-mechanical coupling coefficient |      |           | 0                                    |
| Life time                                  | hour | 5000      |                                      |





## 5、 (Appearance and dimensions): (Unit): mm



## 6、(Package)

| PCS/CTN | Carton 015 (cm) | Carton 039(Outside Size) (cm) | ( Kg )<br>Gross weight | (Kg)<br>Net weight |
|---------|-----------------|-------------------------------|------------------------|--------------------|
| 1000    | 14.8*14.0*4.0   | 33.0*18.0*24.0Y               | 9.5                    | 8.0                |

7、

## 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) Make sure that no potential difference is existed in the water solution when design the circuit and thus result in the electrode of the piezo become electrolytic.

d) Vp-p of both ends of the piezo shall less than or equal to 110v.

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.

| Accomplished by / Date | Approved by / Date |  |
|------------------------|--------------------|--|
|                        |                    |  |