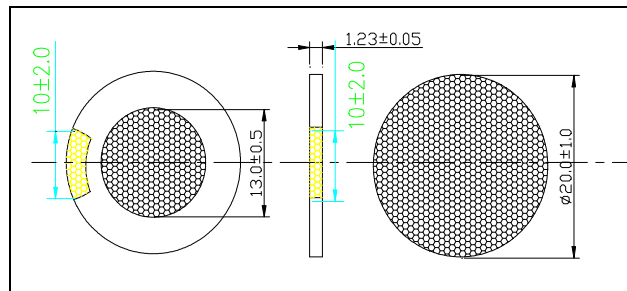




**Piezoceramic Atomizer Disk**

**Model: AW16Y20120F2**

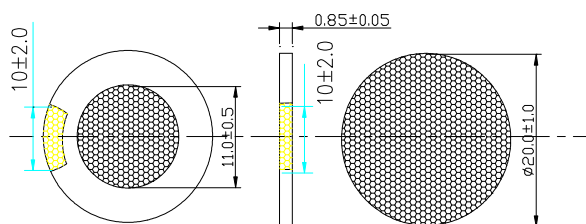
We are producing ultrasonic atomizing transducers of compact and higher performances. Our specially electrode protection layer of the transducer is far superior to Nickel or Titanium electrode used in traditional transducers, it has more advantages in withstanding acid, alkaline and cavitation corrosion, so it features higher strength, less water scale, and longer lifetime.



**Electrical specification:**

Item	Unit	Standard	(Test condition): T=25±5°C
Thick resonance frequency	MHz	1.70±0.05	
Resonance impedance	Ω	≤1.0	
Static capacitance	pF	1800±20%	at 1kHz/1V
Electrical-mechanical coupling coefficient(Kt)		≥0.45	Fs3/Fs1
Natural mist output	ml/hr	350	
Life time	Hours	5000	

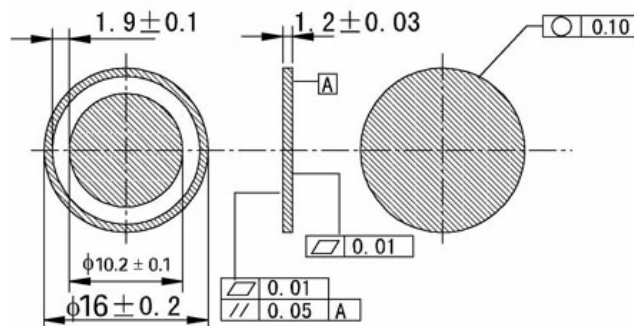
**Model: AW16Y20083F2-272**



Item	Unit	Standard	(Test condition): T=25±5°C
Thick resonant frequency	MHz	2.40±0.05	
Resonant impedance	Ω	≤1.0	
Static capacitance	pF	1800±20%	At 1000Hz/1V
Electrical-mechanical coupling coefficient(Kt)		≥0.45	Fs3/Fs1
Fog output	ml/hr	180	
Life time	Hours	3000	

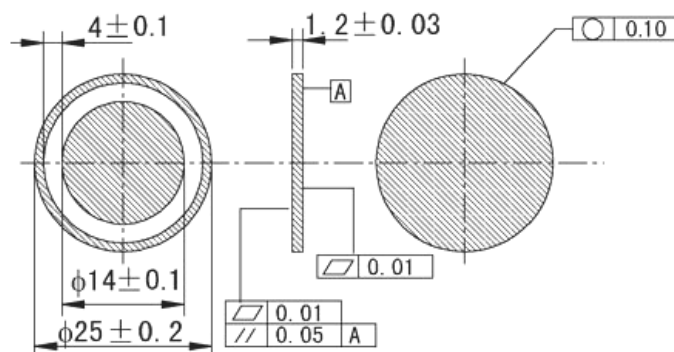


Model: AW10F16-12



Item	Unit	Standard	(Test condition): T=25±5°C
Thick resonant frequency	MHz	1.68±0.05	
Resonant impedance	Ω	≤2.0	
Static capacitance	pF	1300±20%	At 1000Hz/1V
Electrical-mechanical coupling coefficient(Kt)		≥0.42	Fs3/Fs1
Fog output	ml/hr	≥300	
Life time	Hours	6000	

Model: AW10F25-12



Item	Unit	Standard	(Test condition): T=25±5°C
Thick resonant frequency	MHz	1.65±0.05	
Resonant impedance	Ω	≤2.0	
Static capacitance	pF	1900±20%	At 1000Hz/1V
Electrical-mechanical coupling coefficient(Kt)		≥0.42	Fs3/Fs1
Fog output	ml/hr	≥450	
Life time	Hours	6000	



## **BRIEF INTRODUCTION TO ULTRASONIC ATOMIZING TRANSDUCER**

When a pulse signal is applied to the transducer, it produces ultrasonic energy, which increases very fast, and is concentrated with directivity at the center. After this power gets up to the water surface, a water column is generated, and the power tears the water membrane, discharges large numbers of water particles in the air. That's the principle of producing fog with ultrasonic wave.

**Stb** offers a broad range of ultrasonic atomizing transducers, other sizes and specifications, which are not listed in this catalog, are also available on request.

### **◆ FEATURES**

1. Specially protected electrodes have more advantages in withstanding acid, alkaline, and cavitation corrosion
2. Low noise operation, low power consumption
3. Small fog particles (around 1 ~8  $\mu\text{m}$ )
4. Long operation life, high stability and reliability

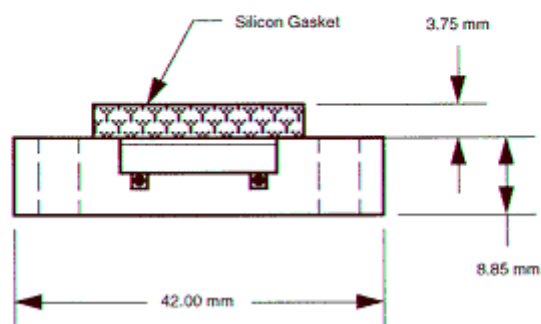
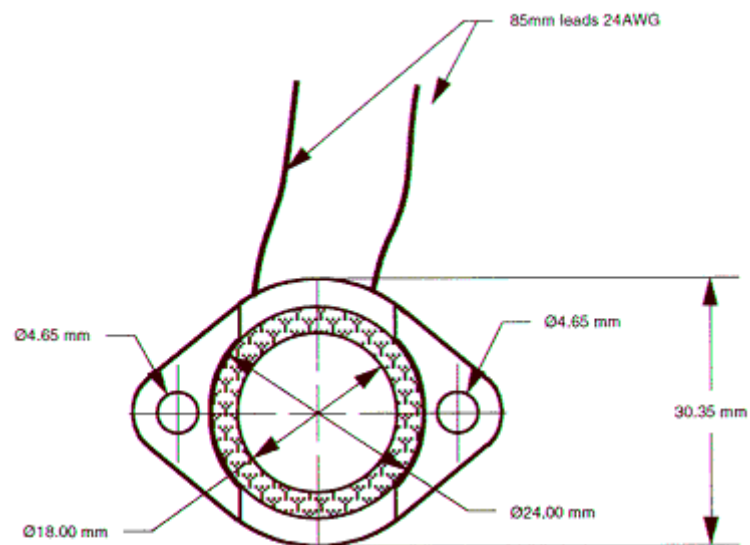
### **◆ APPLICATIONS**

1. Humidifier or atomizer
2. Inhalator
3. Medical nebulizer
4. Cosmetic treatment



## Replacement Nebulizer Assemblies

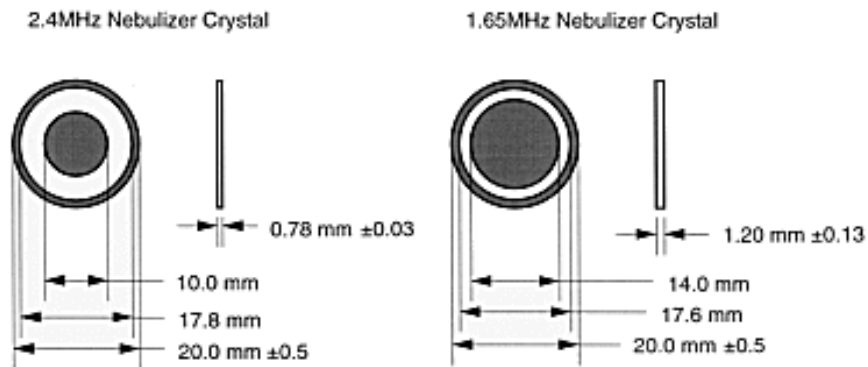
- 1.65 MHz or 2.4 MHz
- quick and easy replacement
- silicone gasket prevents leaks
- stainless steel face protects ceramic
- other coatings available on request





## Replacement Nebulizer Crystals

- 1.65 MHz or 2.4 MHz / stainless steel face
- wraparound "bulleye" electrode pattern for easy connection
- Teflon®, other coatings available for the exposed face



Characteristic	1.65 MHz Crystal	2.4 MHz Crystal
Resonance Frequency	1.65 MHz ±50 kHz	2.4 MHz ±50 kHz
Resonant Impedance	<2 Ω	<2 Ω
Capacitance (1 kHz)	1.8 nF ± 10%	1.4 nF ± 10%
Dissipation Factor (1 kHz)	<0.5%	<0.5%
Piezoelectric Charge Constant, $d_{33}$	$300 \times 10^{-12}$ C/N ± 10%	$300 \times 10^{-12}$ C/N ± 10%