

Piezoelectric Ceramic – Ring piezoelectric ceramic



The material of Piezoelectric Ceramic: PZT4,PZT5,PZT8 or other required materials.

Some Standard Size of Ring Piezoelectric Ceramic:

Size (mm)	Capacitance ($\pm 10\%$)pF	Radial frequency ($\pm 5\%$)KHz	Dielectric dissipation factor $\tan\delta(\%)$	Resonance Impedance $Z_m(\Omega)$	Coupling modulus $K_r(\%)$	Mechanical quality factor (Q_m)	Piezoelectric Material
10*5*2	260	135.5	≤ 0.3	≤ 15	≥ 55	500	PZT4
11*5.5*2	320	124.6	≤ 0.3	≤ 15	≥ 55	500	PZT4
13*5.3*2.2	455	126.8	≤ 0.3	≤ 15	≥ 55	500	PZT4
15*6*2	670	110.0	≤ 0.3	≤ 15	≥ 55	500	PZT4
20*10*5	420	100.0	≤ 0.3	≤ 15	≥ 55	500	PZT4
25*10*3	1240	66.4	≤ 0.3	≤ 15	≥ 45	800	PZT8
25*10*4	930	66.6	≤ 0.3	≤ 15	≥ 45	800	PZT8
30*10*5	1190	51.0	≤ 0.3	≤ 15	≥ 55	500	PZT4
32*11*5	1300	47.2	≤ 0.3	≤ 20	≥ 55	500	PZT4
35*15*5	1770	45.9	≤ 0.5	≤ 15	≥ 49	500	PZT4
35*15*5	1430	45.5	≤ 0.3	≤ 15	≥ 45	800	PZT8
38*15*5	2100	42.0	≤ 0.5	≤ 15	≥ 49	500	PZT4
38*16*5	1650	42.0	≤ 0.3	≤ 15	≥ 55	800	PZT8
38*13*6.4	1780	44.1	≤ 0.5	≤ 15	≥ 49	500	PZT4
40*12*5	2080	47	≤ 0.3	≤ 15	≥ 54	800	PZT8
40*15*5	1970	42.8	≤ 0.5	≤ 15	≥ 55	500	PZT4
40*17*6	1556	41.5	≤ 0.3	≤ 15	≥ 46	800	PZT8
40*20*5	1750	38	≤ 0.5	≤ 15	≥ 51	800	PZT8
42*15*5	1970	40.0	≤ 0.5	≤ 15	≥ 51	500	PZT4
42*17*5	2220	38.8	≤ 0.5	≤ 15	≥ 51	500	PZT4
45*15*5	3180	37.7	≤ 0.5	≤ 15	≥ 51	500	PZT4
45*17*5	2580	38.1	≤ 0.3	≤ 15	≥ 46	800	PZT8
50*17*5	3160	34.8	≤ 0.3	≤ 15	≥ 55	800	PZT8
50*20*6	2490	33.5	≤ 0.3	≤ 15	≥ 46	800	PZT8
50*17*6.5	3280	34.8	≤ 0.3	≤ 15	≥ 55	800	PZT8
50*23*6	2340	32.1	≤ 0.3	≤ 15	≥ 46	800	PZT8
50*27*6	2100	29	≤ 0.3	≤ 15	≥ 47	800	PZT8
60*30*10	1925	26	≤ 0.3	≤ 15	≥ 55	800	PZT8
70*30*10	2640	24.5	≤ 0.3	≤ 15	≥ 55	800	PZT8

Outside diameter range: 3mm---140mm

Inside diameter range: 2mm---40mm

Thickness range: 0.2mm---20mm

Remark:Design and Customize various size Ring Piezoelectric Ceramic as required.

Piezoelectric Ceramic – Disc Piezoelectric Ceramic



The material of piezoelectric ceramic: PZT4, PZT5, PZT8 or other required material

Some standard size of Disc Piezoelectric Ceramic specification:

Size (mm)	Thickness Frequency ft(MHz) ($\pm 5\%$)	Capacitance C(pf) ($\pm 15\%$)	Impedance Zt(Ω)	Electromechanical coupling coefficient Kt (%)	Piezoelectric Material
8 × 2	1.0	263		≥ 43	PZT5
10 × 1	2.0	10840		≥ 44	PZT5
10 × 2	1.0	420		≥ 44	PZT5
15 × 1	2.0	1970		≥ 43	PZT5
15 × 2	1.0	980		≥ 43	PZT5
16 × 1	2.0	2200		≥ 45	PZT5
16 × 2	1.0	1100		≥ 45	PZT5
20 × 1	2.0	3560		≥ 43	PZT5
20 × 2	1.0	1780		≥ 43	PZT5
25 × 1	2.0	4600		≥ 43	PZT5
25 × 2	1.0	2300		≥ 43	PZT5
16 × 0.4	5.0	5400	≤ 5	≥ 45	PZT4
16 × 2.1	1.0	1000	≤ 4	≥ 45	PZT4
20 × 2.0	1.0	1650	≤ 4	≥ 45	PZT4
25 × 0.4	5.0	12800	≤ 4	≥ 45	PZT4
25 × 1.0	2.0	5800	≤ 4	≥ 45	PZT4
25 × 2.0	1.0	2700	≤ 4	≥ 45	PZT4
28 × 1.0	1.0	6940	≤ 4	≥ 45	PZT4
28 × 1.7	1.2	3880	≤ 3	≥ 45	PZT4
28 × 2.0	1.0	3300	≤ 3	≥ 45	PZT4
50 × 2.0	1.0	10000	≤ 3	≥ 45	PZT4
60 × 2.0	1.0	14500	≤ 3	≥ 45	PZT4

Outside diameter range: 3mm---80mm

Thickness range: 0.1mm---20mm

Remark: Design and Customize various size Disc Piezoelectric Ceramic according to your request.

Piezoelectric Ceramic – Tube piezoelectric Ceramic

The material of piezoelectric ceramic:PZT4,
PZT5,PZT8 or other required material

Some standard size of tube piezoelectric ceramic:



Size(mm) ODX ID XH	FM (KHz)	FN (KHz)	Capacitance (pf)	Tgδ (%)
12*9*6	70	72	5860	0.3
18*15*15	63	64	5940	0.2
20*17*15	46.9	50	14109	1.5
24*20*20	47	49	12830	2.0
34*30*20	30	32	1510	0.2
40*32*37	25	25.3	21200	1.5
44*38*29	22.1	24	23120	1.5
51*45*36	20	20.5	18010	1.5
53*45*41	18	22	3060	0.2
69*63*25	16	18	16040	0.5
76*68*40	15	15	19730	0.5
80*60*150	17	18.5	34420	0.25
142*132*80	8	8	8636	0.35

Outside diameter range: 6mm---150mm
 Inside diameter range: 5mm---130mm
 Height range: 5mm---100mm
 Remark:Design and Customize various size Tube Piezoelectric Ceramic according to requirements.

Square/Rectangular Piezoelectric Ceramic

The material of Piezoelectric Ceramic: PZT4,PZT5,PZT8 and other required material

Appliance of Piezoelectric Ceramic:

Medical B ultrasonic equipment	Ultrasonic Sensor	UltCompression sensor
Material stress sensor	Vibration Sensor	Energy/Electricity harvesting
Bolt-clamped ultrasonic transducer	Pressure sensor	Ultrasonic mixing
Ultrasonic press sensor	High-power actuators	more other application

Size Length*width*height(mm)	Fr(MHZ)	K31	ET3(r)
(80--130) × (13--16) × 0.4	3.5	≥0.37	2200-3000
(60-110) × (12-15) × 0.3	5.0	≥0.36	2200-3000
(50-100) × (10-14) × 0.2	7.5	≥0.35	2200-3000

Length range: 5mm---140mm
 Width range: 1.5mm---80mm
 Thickness range: 0.2mm---20mm
 Remark:Design and customize various size Square/ Rectangular Piezoelectric Ceramic according to requirements.

Ball/Hemisphere Piezoelectric Ceramic



The material of Piezoelectric Ceramic: PZT4,PZT5,PZT8 or other required materials.

Some standard size Ball/ Hemisphere Piezoelectric Ceramic specification.

Sphere Diameter (mm)	Hatch Diameter (mm)	thickness	fr(MHz)	Kr	C(nf)		
					P-33	P-52	P-81
5	1.5	0.5	320	0.4	1.8	3.5	
10	3	0.8	160	0.4	4.7	8.8	
15	4	1	113	0.4	9.2	17.3	
20	5	1~1.5	77	0.4	17.0	32.0	
25	5	1~1.5	61	0.4	17.4	32.8	
30	6	1.5~3	50	0.4	23.5	44.3	
40	7	2~4	38	0.4	34.3	64.6	
50	8	2~4	30	0.4	54.8	103.2	
12.5	3.5	2~5	83		6.2		3.7
25	8	2~5			26.2		15.6
37.5	10	2~5					17.7
50	12	3~6					25.5

Ball Piezoelectric Ceramic:

Outside diameter:12mm—100mm

Thickness range:0.3mm—6mm

Hemisphere Piezoelectric Ceramic:

Outside diameter:10mm—160mm

Thickness range:0.6mm—6mm

Remark: Design and Customize various size Ball/ Hemisphere Piezoelectric Ceramic according to your requirements.

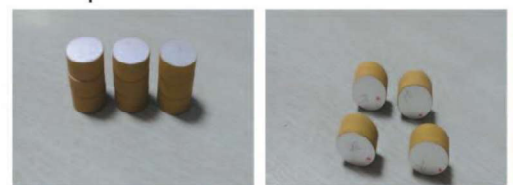
Piezoelectric ceramic – Cylinder Piezoelectric Ceramic

The material of Piezoelectric Ceramic : PZT4,PZT5, PZT8 or other required materials.

Size Range of Cylinder Piezoelectric Ceramic :

Diameter Range: 2mm—20mm

Height Range:3mm—40mm



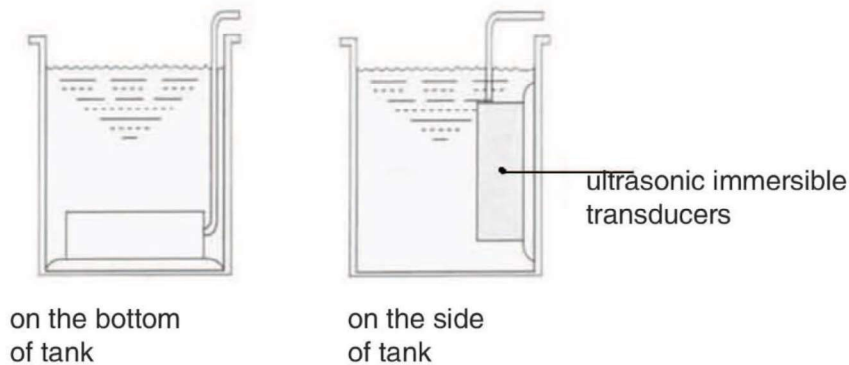
Remark:Design and Customize various size Piezoelectric Ceramic according to your requirements.

Ultrasonic Equipment – Ultrasonic Immersible Transducer

Main features of Ultrasonic Immersible Transducer :

- 1.with a simple,convenient and highly effective design, ultrasonic immersible transducers apply to all kinds of ultrasonic cleaning and liquid processing,
- 2.Immersible ultrasonic transducers can be directly put in both standard and custom sizes process tanks. So it's very easy to operate.
- 3.The frequency of Ultrasonic immersible transducer system is from 17khz to 135kh,and suitable ultrasonic generator to match with such Ultrasonic immersible transducers array.moreover, the frequency, power and time of ultrasonic generator for can be adjusted according to need.
- 4.Immersible ultrasonic transducers housings are 316 stainless steel and 304 stainless steel
- 5.Ultrasonic immersible transducers are widely used for cleaning electron, hardware, magnetic industry, car maintenance ,textile industry mechanical processing, electroplating, food and beverage industries, cleaning precision parts, glasses, electronic components, circuit boards, semiconductors, special high-precision parts and so on.

The drawing of ultrasonic immersible transducer installation:



The standard size of Ultrasonic Immersible Transducers:

(Remarks: customize various size ultrasonic immersible transducers according to your need)

