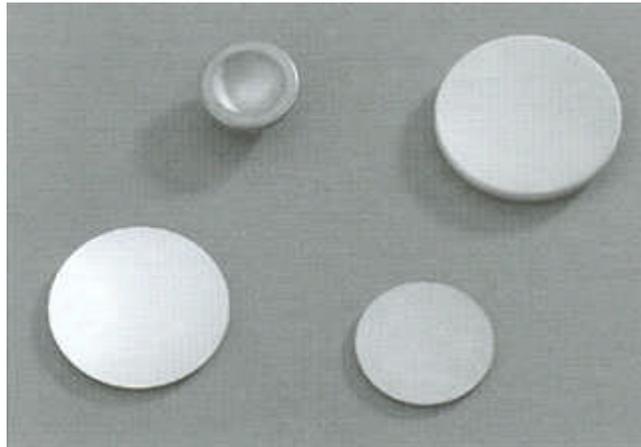


Spherical Focusing Transducer Crystals



Boston Piezo-Optics produces spherical focusing transducer crystals for clinical, laboratory, and field ultrasonography. These crystals are used in applications that require an acoustic focal point that represents a position of peak acoustic intensity. Typical applications include flow and level sensing, air and high power acoustic applications, non-destructive testing, materials evaluation, medical diagnostic analyses and measurements, and therapeutic treatments.

We can provide an almost endless variety of focus, frequency and diameter combinations. Spherical crystals should be made from the users choice of piezoceramic material and poled after final shaping and electroding. We can also produce spherical crystals from single-crystal materials, but their efficiency is at the users' peril.

We have an impressive array of convex and concave radius tools, or we can obtain tooling for your specific request.

General Specifications

Material	Frequency Range	Diameter (typical)	Focal Length Range
Lead Zirconate Titanate	500 KHz - 15 MHz	0.250"	1" to 15"
	500 KHz - 10 MHz	0.500"	1" to 15"
	500 KHz - 7 MHz	0.750"	1" to 15"
	7.5 MHz - 10 MHz		3" to 15"
	500 KHz - 7 MHz	1.000"	1" to 15"

	7.5 MHz - 10 MHz		4" to 15"
	500 KHz - 5 MHz	1.500"	1" to 15"
	5.5 MHz - 7.5 MHz		4" to 15"
	500 KHz - 5 MHz	2.000"	2" to 15"
	5.5 MHz - 7.5 MHz		5" to 15"
	500 KHz - 3 MHz	3.000"	4" to 15"
	500 KHz - 2 MHz	4.000"	7" to 15"

Other sizes and frequencies are available

Frequency Tolerance: +/- 5%

Diameter Tolerance: +/- 0.003" to +/- 0.010", depending on size

Polarity: Concave radius is the (+) surface, or your choice

Electrodes available in vacuum-deposited chrome/gold, silver, aluminum, or electroless nickel, copper or gold.

Lead wires available on request.

Questions? [Contact us](#) to discuss your particular application.