ABSTRACT

A piezoelectric vibration element comprises a vibration element part 1, a vibration propagation part 2 made of a same material with a greater thickness than the vibration element part 1, a groove 6 disposed in the boundary of the vibration element part 1 and vibration propagation part 2, excitation electrodes 3 confronting the face side and back side of the vibration element part 1, a connection electrode 4 disposed in the vibration propagation part 2, and an external lead-out electrode 5 connected electrically to the connection electrode 4. In this piezoelectric vibration element, the main vibration is the overtone mode, that is, when the lowest order wave mode is first-order or second-order, the wavelength in the thickness direction is (2n+1) times (n being a natural number) thereof.

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