

ABSTRACT

To provide a piezoelectric resonator in which the variation in resonance frequency caused by the variation in thickness of Si is suppressed.

In a piezoelectric resonator 1 including a single crystal Si 5, a piezoelectric thin film 8 formed from aluminum nitride and provided on the single crystal Si 5, and first and second electrodes 6 and 7 provided so as to sandwich the piezoelectric thin film 8, an element excluding nitrogen and aluminum is doped into the piezoelectric thin film 8 formed from aluminum nitride, and a synthetic acoustic velocity of the acoustic velocities of the portions other than the single crystal Si 5 substantially coincides with the acoustic velocity thereof.