

ABSTRACT

A silicon single crystal is pulled up such that nitrogen concentration of the crystal is 1×10^{11} to 2×10^{13} atoms/cm³, the crystal cooling rate is about 4.2°C/min at a temperature of a silicon melting point to 1350°C and is about 3.1°C/min at a temperature of 1200°C to 1000°C, and oxygen concentration of a wafer is 9.5×10^{17} to 13.5×10^{17} atoms/cm³. After a heat treatment is performed on the wafer sliced from the silicon single crystal in a treatment condition of 875°C for about 30 min, growth of an epitaxial layer is caused. Thus, an epitaxial wafer in which the number of epitaxial defects is not increased while maintaining predetermined oxygen concentration and slips do not occur is produced.