ABSTRACT

SILICON WAFER AND METHOD FOR PRODUCING THE SAME

PROBLEM

There is provided a silicon wafer composed of a silicon crystal having excellent withstand voltage characteristics of an oxidized film and high C-mode characteristics. In addition, a method for producing the aforesaid silicon wafer is provided.

SOLUTION

A silicon wafer having nitrogen and hydrogen, characterized in that: a plurality of voids constituting a bubble-like void aggregate are present equal to or more than 50% relative to total void number; a V1 region having a void density of over $2\times10^4/cm^3$ and below $1\times10^5/cm^3$ occupies equal to or less than 20% in total area of the silicon wafer; a V2 region having a void density of 5×10^2 to $2\times10^4/cm^3$ occupies equal to or more than 80% in total area of the silicon wafer; and bulk micro defect density is equal to or higher than $5\times10^8/cm^3$.

SELECTED DRAWING

Fig.1