

~~BONDED SOI WAFER AND METHOD FOR MANUFACTURING BONDED SOI~~ WAFER

BACKGROUND OF THE INVENTION

1. Field of the Invention

[0001]

The present invention relates to a method for manufacturing a bonded SOI wafer and a bonded SOI wafer.

2. Description of the Related Art

[0002]

As an SOI wafer for a RF (Radio Frequency) device, the SOI wafer has been treated by increasing the resistivity of the base wafer. However, it has been required to cope with higher frequency in order to handle further speedup, and accordingly it comes to be difficult to handle only by using conventional high-resistance wafers.

[0003]

As a countermeasure, it has been proposed to add a layer which is effective in annihilating generated carriers (a carrier trap layer) immediately under a buried oxide film layer (a BOX layer) of an SOI wafer. Accordingly, it is becoming necessary to form a high-resistance polycrystalline silicon layer on a base wafer to recombine carriers generated in a high-resistance wafer.

[0004]

Patent Literature 1 describes forming a polycrystalline silicon layer or an amorphous silicon layer as a carrier trap layer on the interface of a BOX layer and a base wafer.

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