

[ABSTRACT]

SILVER-GOLD ALLOY BONDING WIRE

[Object]

The present invention has an object to provide a highly pure silver-gold alloy bonding wire that has excellent thermal shock resistance after sealed with resin compared to a silver-gold alloy bonding wire having a conventional composition. The present invention has another object to provide a silver-gold alloy bonding wire that is smoothly unwound from a spool.

[Structure] The silver-gold alloy bonding wire of the present invention is characterized by comprising:

- an alloy composed of not lower than 10% and not higher than 30% of gold (Au) and not lower than 30 ppm and not higher than 90 ppm of calcium (Ca) with the remainder being made up of silver (Ag) at purity relative to a metallic element except for elements Au and Ca of 99.99% or higher, in mass percentage,

- a layer enriched with oxygen (O) and calcium (Ca) formed as a surface layer on the surface of the alloy, and

- a gold-enriched layer formed immediately below the surface layer.

[Selected Drawing] FIG. 1