

ABSTRACT

There is provided an Al bonding wire which can achieve a sufficient bonding reliability of bonded parts of the bonding wire under a high temperature state where a semiconductor device using the Al bonding wire is operated. The Al bonding wire contains 0.01 to 1% of Sc, and further contains 0.01 to 0.1% in total of at least one or more of Y, La, Ce, Pr and Nd. With regard to the Al bonding wire, a recrystallization temperature thereof is increased, so that the proceeding of recrystallization of the bonding wire can be suppressed, and strength of the wire can be prevented from being decreased even when the semiconductor device is continuously used under a high temperature environment. Accordingly, the Al bonding wire can sufficiently secure the reliability of the bonded parts after a high-temperature long-term hysteresis.

[No figure]