Abstract

Gold-Platinum-Palladium Alloy Bonding Wire

[Objects]
A gold-platinum-palladium alloy bonding wire is proposed for use with semiconductor devices for automotive vehicles, which exhibits excellent connection performance reliability when connected to an aluminum pad such that even in a case wherein an epoxy resin free of halogen elements is used, the durability throughout high temperature exposure and the capability of preserving electric properties despite high temperature exposure are excellent.

[Means for Solution]
A gold-platinum-palladium alloy bonding wire composed of platinum by 0.4 - 1.2 mass %, palladium by 0.01 - 0.5 mass %, aluminum by 10 - 30 mass ppm, at least one of calcium and magnesium by 10 - 60 mass ppm in sum, and a balance, which is gold of a purity of 99.999 mass % or greater.