

Abstract

Alloy Material, Contact Probe, and Connection Terminal

Provided are an alloy material having excellent conductivity, and further having high hardness and excellent workability for use in a contact probe; and a
5 contact probe and a connection terminal each of which consists of the alloy material. A composition range of a ternary alloy of silver (Ag), palladium (Pd), and copper (Cu) contains 17 at% to 25 at% of Ag, 30 at% to 45 at% of Pd, and 30 at% to 53 at% of Cu. At least one of manganese
10 (Mn), tin (Sn), silicon (Si), antimony (Sb), titanium (Ti) and magnesium (Mg) is added to the composition in a range of 4.5 at% or less, in which the Mn in a range of 0.5 at% to 3.5 at%, the Sn in a range of 1 at% to 2 at%, the Si in a range of 0.5 at% to 2 at%, the Sb in a range of 0.5 at%
15 to 3 at%, the Ti in a range of 0.5 at% to 2 at%, and the Mg in a range of 0.5 at% to 3.5 at% are added to the composition.

Fig. 1