

SOLDER ALLOY, SOLDER BALL, AND SOLDER JOINT**ABSTRACT**

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The present invention provides: a solder alloy which exhibits excellent pin contact performance and high bonding strength; a solder ball; and a solder joint. This solder alloy has an alloy composition that contains, in mass%, from 0.8% to 1.5% of Ag, from 0.1% to 1.0% of Cu, from 0.01% to 0.10% of Ni and from 0.006% to 0.009% of P, with the balance being
10 made up of Sn. It is preferable that the alloy composition satisfies formula (1) and formula (2). Formula (1): $2.0 \leq (\text{Ag} \times \text{Cu} \times \text{Ni})/\text{P} \leq 25$ Formula (2): $0.500 \leq (\text{Sn} \times \text{P}) \leq 0.778$. In formula (1) and formula (2), Ag, Cu, Ni, P and Sn represent the contents (mass%) of the respective elements in the alloy composition.

15 [No Figure]