

SOLDER ALLOY

ABSTRACT

A solder alloy of the present invention contains 64 to 66% of Sn by weight, 0.8 to 1.5% of Ag by weight, 0.3 to 1.0% of Sb by weight, 0.1 to 0.25 % of Cu by weight, and the balance being Pb. The resulting solder alloy acquires significantly improved characteristics in high strain thermal fatigue, low strain thermal fatigue, high temperature creep, mechanical fatigue, interfacial strength, and impact strength, as compared with those of the conventional solder alloy. Therefore, the solder alloy obtains wide application such that it can be used in an automatic soldering apparatus of a jet stream system, the strength thereof can be improved without deteriorating solderability, and the strength of the connecting portion between elements can be improved without altering present designs or packaging equipment.

No suitable figure