

Lead-Free Solder Alloy

Abstract

5 A lead-free solder alloy capable of forming solder joints in which electromigration
and an increase in resistance during electric conduction at a high current density
are suppressed has an alloy composition consisting essentially of 1.0 - 13.0 mass %
of In, 0.1 - 4.0 mass % of Ag, 0.3 - 1.0 mass % of Cu, a remainder of Sn. The
solder alloy has excellent tensile properties even at a high temperature exceeding
10 100° C and can be used not only for CPUs but also for power semiconductors.

Fig. 1