ABSTRACT

A semiconductor device of the present invention includes a semiconductor element having an electrode pad; a substrate over which the semiconductor element is mounted and which has an electrical bonding part; and a bonding wire electrically connecting the electrode pad to the electrical bonding part, wherein a main metal component of the electrode pad is the same as or different from a main metal component of the bonding wire, and when the main metal component of the electrode pad is different from the main metal component of the bonding wire, a rate of interdiffusion of the main metal component of the bonding wire and the main metal component of the electrode pad at a junction of the bonding wire and the electrode pad under a post-curing temperature of an encapsulating resin is lower than that of interdiffusion of gold (Au) and aluminum (Al) at a junction of aluminum (Al) and gold (Au) under the post-curing temperature.