SEMICONDUCTOR DEVICE AND METHOD OF MANUFACTURING THE SAME

ABSTRACT

A semiconductor device includes a semiconductor element that is mounted on a substrate, an electrode pad that contains aluminum as a main component and is provided in the semiconductor element, a copper wire that contains copper as a main component and connects a connection terminal provided on the substrate and the electrode pad, and an encapsulant resin that encapsulates the semiconductor element and the copper wire. When the semiconductor device is heated at 200°C for 16 hours in the atmosphere, a barrier layer containing any metal selected from palladium and platinum is formed at a junction between the copper wire and the electrode pad.

[Fig.1]