SEMICONDUCTOR ELEMENT AND WAFER LEVEL CHIP SIZE PACKAGE THEREFOR

ABSTRACT OF THE DISCLOSURE

A semiconductor device, encapsulated in a wafer level chip size package (WLCSP), includes a plurality of pad electrodes formed on the surface of a semiconductor chip, wherein a first insulating layer is formed on the surface of the semiconductor chip except the pad electrodes; a plurality of connection electrodes and at least one heat-dissipation electrode are formed on the surface of the first insulating layer; the pad electrodes and the connection electrodes are mutually connected via a first wiring portion; the heat-dissipation electrode is connected with a second wiring portion; and a second insulating layer is formed to enclose the electrodes and wiring portions, wherein the second wiring portion is arranged in proximity to a heating portion of the semiconductor chip and is formed on the surface of the first insulating layer except the prescribed region corresponding to the first wiring portion.

Figure 1