

METHOD OF PRODUCING EPOXY RESIN-ENCAPSULATED SEMICONDUCTOR
DEVICE

ABSTRACT OF THE DISCLOSURE

In a method of producing a resin-encapsulated semiconductor device, a lead frame having an semiconductor element bonded thereto and wire-bonded thereto is set as an insert into an injection mold. An epoxy resin molding compound is injected into the mold by an injection molding. In this method, an injection pressure of the injection molding machine is gradually increased in such a manner that a maximum pressure of 30 kg/cm² to 300 kg/cm² is achieved at the time when 80% to 95% of a total amount of the epoxy resin molding compound to be injected is injected into the mold. Subsequently, the remaining epoxy resin molding compound is injected into the mold at an injection pressure of 20 kg/cm² to 100 kg/cm². A heating cylinder of the injection molding machine is divided into a plurality of zones which are controlled in the temperature independently. The zone nearest to a nozzle of the heating cylinder is controlled to 65°C - 110°C while that zone nearest to a hopper of the heating cylinder is controlled to the ordinary temperature to 50°C.

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Fig 2