

ADHESIVE FOR TEMPORARY BONDING, ADHESIVE LAYER, METHOD FOR MANUFACTURING WAFER WORK PIECE AND SEMICONDUCTOR DEVICE USING SAME, REWORK SOLVENT, POLYIMIDE COPOLYMER, POLYIMIDE MIXED RESIN, AND RESIN COMPOSITION

ABSTRACT

The present invention provides: a temporary-bonding adhesive having excellent heat resistance, whereby a semiconductor circuit formation substrate and a support substrate can be bonded by a single type of adhesive layer, the adhesive force thereof does not change over the course of steps for manufacturing a semiconductor device or the like, and the adhesive can subsequently be easily de-bonded at room temperature under mild conditions; and a method for manufacturing a semiconductor device using the temporary-bonding adhesive.

The present invention is a temporary-bonding adhesive characterized by being a polyimide copolymer having at least an acid dianhydride residue and a diamine residue, the diamine residue including both of (A1) a polysiloxane-based diamine residue represented by a general formula (1) in which n is a natural number from 1 to 15, and (B1) a polysiloxane-based diamine residue represented by a general formula (1) in which n is a natural number from 16 to 100, the polyimide copolymer containing 40–99.99 mol% of the (A1) residue and 0.01–60 mol% of the (B1) residue.

(No suitable figure)