

CLAIMS

[Claim 1]

A method of mounting a die comprising the steps of:

preparing a die having a bump formation surface on which a plurality of bump electrodes is formed;

disposing a vacuum suction tool having a suction surface above the die such that the suction surface faces toward the bump formation surface;

suctioning an air-permeable porous sheet with the suction surface so as cover a suction hole formed on the suction surface with the porous sheet;

suctioning the die using the vacuum suction tool, with the porous sheet being sandwiched between the suction surface and the bump formation surface;

mounting the suctioned die in a bonding region of a substrate with an adhesive material interposed therebetween, by pressurizing the die with the vacuum suction tool in such a manner that the porous sheet fully absorbs a protrusion height of the plurality of bump electrodes and by also heating the die and the adhesive material through the vacuum suction tool, wherein the porous sheet serves as a filter that inhibits entry of fume gas generated when the die or the adhesive material is heated, into the suction hole of the vacuum suction tool; and

advancing a region of the porous sheet sandwiched between the suction surface and the bump formation surface,

wherein, in the mounting step, a thickness of the porous sheet, as measured during the pressurization by the vacuum suction tool, is equal to or greater than the protrusion height of the bump electrodes on the bump formation surface.

[Claim 2]

The method of mounting a die according to claim 1, wherein the porous sheet is made of a material softer than the bump electrodes or the suction surface.

[Claim 3]

The method of mounting a die according to claim 1 or 2, wherein the porous sheet is made of non-woven cloth.

[Claim 4]

The method of mounting a die according to any one of claims 1 to 3, wherein the suction surface has a larger size than the bump formation surface.

[Claim 5]

The method of mounting a die according to any one of claims 1 to 4, wherein the porous sheet is fed from a pair of reels disposed on left and right sides of the vacuum suction tool.