CLAIMS

{Claim 1}

An adhesive composition, comprising:

an epoxy resin (A);

an epoxy resin curing agent (B);

a phenoxy resin (C); and

an inorganic filler (D),

wherein the phenoxy resin (C) has an elastic modulus of 500 MPa or more at 25°C,

wherein a proportion of the phenoxy resin (C) in a total content of the epoxy resin (A) and the phenoxy resin (C) is 10 to 60 mass%, and

wherein a nanoindentation hardness at 25°C of a film-like adhesive formed using the adhesive composition and before being subjected to curing ~~formed using the adhesive composition~~ is ~~0.10~~1.40 to 2.20 MPa ~~or more~~, and the Young's modulus at 25°C of a film-like adhesive formed using the adhesive composition and before being subjected to curing ~~formed using the adhesive composition~~ is 100 to 2000 MPa ~~or more~~.

{Claim 2}

The adhesive composition according to claim 1,

wherein the inorganic filler (D) has an average particle diameter (d50) of 0.01 to 5.0 μm, and

wherein a proportion of the inorganic filler (D) in a total content of the epoxy resin (A), the epoxy resin curing agent (B), the phenoxy resin (C), and the inorganic filler (D) is 5 to 70 vol%.

{Claim 3}

The adhesive composition according to claim 2, wherein the inorganic filler (D) contains an inorganic filler having a Mohs hardness of 2 or more.

{Claim 4}

The adhesive composition according to any one of claims 1 to 3, wherein when a film-like adhesive formed using the adhesive composition and before being subjected to curing ~~formed using the adhesive composition~~ is heated at a temperature elevation rate of 5°C/min from 25°C, a melt viscosity at 120°C is in a range of 100 to 10000 Pa·s.

{Claim 5}

A film-like adhesive obtained from the adhesive composition according to any one of claims 1 to 4.

{Claim 6}

The film-like adhesive according to claim 5, which has a thickness of 1 to 60 μm.

{Claim 7}

The film-like adhesive according to claim 5 or 6, which has a thickness of 5 to 15 μm.

{Claim ~~7~~8}

A method of producing a semiconductor package, comprising:

a first step of providing an adhesive layer by thermocompression bonding the film-like adhesive according to any one of claims 5 ~~or 6~~to 7 to a back surface of a semiconductor wafer in which at least one semiconductor circuit is formed on a surface, and providing a dicing tape, with the adhesive layer interposed between the back surface and the dicing tape;

a second step of dicing the semiconductor wafer and the adhesive layer simultaneously to obtain a semiconductor chip with an adhesive layer on the dicing tape, the semiconductor chip with an adhesive layer including the semiconductor wafer and the adhesive layer on the dicing tape;

a third step of removing the dicing tape from the adhesive layer and

thermocompression bonding the semiconductor chip with an adhesive layer and a wiring board, ~~with~~via the adhesive layer; and

a fourth step of thermally curing the adhesive layer.

{Claim ~~8~~9}

A semiconductor package wherein a semiconductor chip and a wiring board, or semiconductor chips are bonded with a thermally curable component of the film-like adhesive according to any one of claims 5 ~~or 6~~to 7.