

CLAIMS

1. A method of producing an electronic device, comprising:

a step (A) of preparing a structure which includes an electronic component having a circuit forming surface, and an adhesive laminated film which includes a base material layer and an adhesive resin layer and in which the adhesive resin layer is attached to the circuit forming surface of the electronic component such that the circuit forming surface is protected;

a step (B) of back-grinding a surface of the electronic component opposite to the circuit forming surface in a state of being attached to the adhesive laminated film;

a step (C) of dicing the electronic component in a state of being attached to the adhesive laminated film; and

a step (D) of forming an electromagnetic wave-shielding layer on the separated electronic components in a state of being attached to the adhesive laminated film, in this order,

wherein the identical adhesive laminated film is used as the adhesive laminated film in the step (A), the step (B), the step (C), and the step (D). 1

~~2. The method of producing an electronic device according to claim 1,~~

wherein the adhesive laminated film further includes an unevenness-absorptive resin layer between the base material layer and the adhesive resin layer. 1

~~3. The method of producing an electronic device according to claim 2, further comprising:~~

a step (E) of crosslinking the unevenness-absorptive resin layer to improve heat resistance of the unevenness-absorptive resin layer between the step (A) and the step (D).

~~4. The method of producing an electronic device according~~

~~to claim 2 or 3,~~

2. The method of producing an electronic device according to claim 1,

wherein the unevenness-absorptive resin layer contains a crosslinkable resin.

~~53.~~ 3. The method of producing an electronic device according to ~~any one of claims~~ claim 1 or 2 to 4,

wherein a thickness of the unevenness-absorptive resin layer is in a range of 10 μm to 1000 μm .

~~64.~~ 4. The method of producing an electronic device according to any one of claims 1 to ~~53,~~ 4, further comprising:

a step (F) of peeling the electronic component and the adhesive laminated film from each other after the step (D).

~~75.~~ 5. The method of producing an electronic device according to claim ~~64,~~ 4,

wherein the electronic component is peeled off from the adhesive laminated film in the step (F) in a state in which an interval between adjacent electronic components is enlarged by expanding a region of the adhesive laminated film where the electronic component is attached, in an in-plane direction of the film.

~~86.~~ 6. The method of producing an electronic device according to claim ~~64~~ 4 or ~~75,~~ 5,

wherein the adhesive resin layer contains a radiation-crosslinking adhesive, and

the method further comprises a step (G) of irradiating the adhesive resin layer with radiation to crosslink the adhesive resin layer before the step (F).

7. The method of producing an electronic device according to any one of claims 1 to 6,

~~9. The method of producing an electronic device according to any one of claims 1 to 8,~~

wherein the circuit forming surface of the electronic component includes a bump electrode.

~~108.~~ The method of producing an electronic device according to claim ~~97~~,

wherein in a case where a height of the bump electrode is set as H [μm] and a thickness of the unevenness-absorptive resin layer is set as d [μm], H/d is in a range of 0.01 to 1.

9. The method of producing an electronic device according to any one of claims 1 to 8,

~~11. The method of producing an electronic device according to any one of claims 1 to 10,~~

wherein the electromagnetic wave-shielding layer is formed on the electronic component in the step (D) using at least one method selected from a sputtering method, a vapor deposition method, a spray coating method, an electrolytic plating method, and an electroless plating method.

10. The method of producing an electronic device according to any one of claims 1 to 9,

~~12. The method of producing an electronic device according to any one of claims 1 to 11,~~

wherein the electromagnetic wave-shielding layer is formed on at least a surface opposite to the circuit forming surface and a side surface that connects the circuit forming surface with the opposite surface of the electronic component in the step (D).

~~13. The method of producing an electronic device according to any one of claims 1 to 12,~~

11. The method of producing an electronic device according to any one of claims 1 to 10,

wherein a resin constituting the base material layer contains one or two or more selected from the group consisting of a polyester-based elastomer, a polyamide-based elastomer, a polyimide-based elastomer, polybutylene

terephthalate, polyethylene terephthalate, polyethylene naphthalate, and polyimide.

~~14. The method of producing an electronic device according to any one of claims 1 to 13,~~

12. The method of producing an electronic device according to any one of claims 1 to 11,

wherein an adhesive constituting the adhesive resin layer contains one or two or more selected from a (meth)acrylic-based adhesive, a silicone-based adhesive, a urethane-based adhesive, an olefin-based adhesive, and a styrene-based adhesive.