CLAIMS

1. An electrical element mounting package comprising:

a substrate that is plate-like;

at least one base that protrudes from a front surface of the substrate, and that has a mounting surface on which an electrical element is mounted;

an element terminal that is provided on the mounting surface of the at least one base;

a side conductor that is provided on a side surface of the at least one base, and that extends in a thickness direction of the at least one base;

a substrate-side via conductor that is provided inside the substrate, and that extends in a thickness direction of the substrate;

a wiring conductor that is provided inside the substrate, and that extends in a surface direction of the substrate;

a sealing metal film that is provided on the front surface of the substrate to surround the at least one base; and

a power supply terminal that is provided on an outer side of the sealing metal film,

wherein the substrate and the at least one base are made of ceramics integrally,

wherein the element terminal, the side conductor, and the substrate-side via conductor are connected,

wherein the wiring conductor and the substrate-side via conductor are connected,

wherein the power supply terminal and the wiring conductor are connected.

2. An electrical element mounting package comprising:

a substrate that is plate-like;

at least one base that protrudes from a front surface of the substrate, and that has a mounting surface on which an electrical element is mounted;

an element terminal that is arranged on the mounting surface of the at least one base;

a base-side via conductor that is provided inside the at least one base, and that extends in a thickness direction of the at least one base;

a substrate-side via conductor that is provided inside the substrate, and that extends in a thickness direction of the substrate;

a wiring conductor that is provided inside the substrate, and that extends in a surface direction of the substrate;

a sealing metal film that is provided on the front surface of the substrate to surround the at least one base; and

a power supply terminal that is provided on an outer side of the sealing metal film,

wherein the substrate and the at least one base are made of ceramics integrally,

wherein the element terminal, the base-side via conductor, and the substrate-side via conductor are connected,

wherein the wiring conductor and the substrate-side via conductor are connected,

wherein the power supply terminal and the wiring conductor are connected.

3. The electrical element mounting package according to claim 1 or 2, wherein the wiring conductor is arranged at a

position closer to a back surface of the substrate than the front surface of the substrate.

4. The electrical element mounting package according to any one of claims 1 to 3, wherein

a groove is provided on the front surface of the substrate to surround the at least one base, and

the sealing metal film is provided inside the groove.

5. The electrical element mounting package according to any one of claims 1 to 4, wherein the power supply terminal is provided at a position that is lower than the front surface of the substrate.

6. The electrical element mounting package according to any one of claims 1 to 5, wherein

an outer edge of the power supply terminal includes two linear edges that intersect, and

the two linear edges are positioned to fit an edge of an end surface and an edge of a side surface of the substrate, respectively.

7. The electrical element mounting package according to any one of claims 1 to 6, wherein a concave portion is provided in an inner region of the sealing metal film, and the at least one base is arranged on a bottom surface of the concave portion.

8. The electrical element mounting package according to any one of claims 1 to 7, wherein the at least one base comprises a plurality of bases that are provided in an inner region of the sealing metal film.

9. The electrical element mounting package according to claim 8, wherein

the at least one base comprises a composite base including a first base and a second base in an inner region of the sealing metal film, and

a height of the second base is less than a height of the first base in the composite base.

10. The electrical element mounting package according to claim 9, wherein the composite base comprises three sets of composite bases that are provided in the inner region of the sealing metal film.

11. The electrical element mounting package according to claim 10, wherein

the three sets of the composite bases includes:

a red composite base that includes a red laser diode first base for mounting a red laser diode;

a green composite base that includes a green laser diode first base for mounting a green laser diode; and

a blue composite base that includes a blue laser diode first base for mounting a blue laser diode, wherein

a smaller one of an interval between the red composite base and the green composite base, and an interval between the red composite base and the blue composite base, is greater than an interval between the green composite base and the blue composite base.

12. The electrical element mounting package according to claim 10 or 11, wherein the three sets of the composite bases are arranged such that directions of light emitted

from the respective mounted laser diodes are oriented in directions in which the light does not hit the three sets of the composite bases.

13. An array package comprising

a plurality of the electrical element mounting packages according to any one of claims 1 to 12, wherein

the plurality of electrical element mounting packages are connected.

14. The array package according to claim 13, wherein the plurality of electrical element mounting packages are sintered integrally.

15. An electrical device comprising:

the electrical element mounting package according to any one of claims 1 to 14; and

an electrical element that is mounted on the mounting surface of the electrical element mounting package.

16. An electrical device comprising:

the electrical element mounting package according to any one of claims 1 to 12;

an electrical element that is mounted on the mounting surface of the electrical element mounting package; and

a cap that is provided on the sealing metal film, the cap comprising a side window.

17. An electrical device comprising:

the array package according to claim 13 or 14; and

an electrical element that is mounted on a mounting surface of the array package.