the counter dopant of the second conductive type to the first portion than the second portion.

7. The method according to claim **1**, wherein the dopant layer to the first surface of the semiconductor substrate comprises a first portion adjacent to the electrode and a second portion other than the first portion, the method comprising:

doping the dopant of the first conductive type to the first portion to be higher than the second portion; and

uniformly doping the counter dopant of the second conductivity type to the first portion and the second portion.

8. The method according to claim **1**, wherein the dopant layer to the first surface of the semiconductor substrate comprises a first portion adjacent to the electrode and a second portion other than the first portion, the method comprises forming the second portion to be more shallow than the first portion.

9. The method according to claim **1**, further comprising:

forming another dopant layer to a second surface of the semiconductor substrate by doping a dopant of a second conductivity type and a counter dopant of a first conductivity type opposite to the second conductivity type, wherein a doping amount of the counter dopant of the first conductivity type is less than a doping amount of the dopant of the second conductivity type; and

forming another electrode electrically connected to the another dopant layer.

10. The method according to claim **9**, further comprising:

doping entirely the another dopant layer to the second surface of the semiconductor substrate with the dopant of the second conductive type; and

doping a part of the another dopant layer to the second surface of the semiconductor substrate with the counter dopant of the first conductive type.

11. The method according to claim **9**, wherein a ratio of the doping amount of the counter dopant of the first conductive type to the doping amount of the dopant of the second conductive type is 1:3 to 1:30.

12. The method according to claim **9**, further comprises doping the dopant of the second conductive type and the counter dopant of the first conductive type by an ion-implantation method, wherein an ion-implanting energy of the counter dopant of the first conductive type is less than an ion-implanting energy of the dopant of the second conductive type.

13. The method according to claim **9**, wherein the another dopant layer to the second surface of the semiconductor substrate comprises a first portion adjacent to the another electrode and a second portion other than the first portion, the method comprises doping the counter dopant of the first conductive type to the second portion and not to the first portion.

14. The method according to claim **9**, wherein the another dopant layer to the second surface of the semiconductor substrate comprises a first portion and a second portion other than the first portion, the method comprises doping a different amount of the counter dopant of the first conductive type to the first portion than the second portion.

15. The method according to claim **9**, wherein the another dopant layer to the second surface of the semiconductor substrate comprises a first portion adjacent to the another electrode and a second portion other than the first portion, the method comprising:

doping the dopant of the second conductive type to the first portion to be higher than the second portion; and

uniformly doping the counter dopant of the first conductivity type to the first portion and the second portion.

16. The method according to claim **9**, wherein the another dopant layer to the second surface of the semiconductor substrate comprises a first portion adjacent to the another electrode and a second portion other than the first portion, the method comprises forming the second portion to be more shallow than the first portion.

17. The method according to claim **9**, further comprises activating the dopant of the second conductivity type and the counter dopant of the first conductivity type by a same heat-treatment process.

18. A method of manufacturing a solar cell, comprising:

forming a dopant layer to a first surface of a semiconductor substrate including a base dopant by doping a dopant of a first conductive type and a counter dopant of a second conductive type opposite to the first conductive type, wherein a doping amount of the counter dopant is less than a doping amount of the dopant of the first conductive type; and

forming an electrode electrically connected to the dopant layer after forming the dopant layer,

wherein, while forming the dopant layer, the counter dopant is entirely doped to the first surface of the semiconductor substrate to be included in an entire portion of the dopant layer, and

wherein the counter dopant is counter to the dopant of the first conductive type.

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