curing the first metal paste to form a first metal layer;

heating the first metal contact, first metal layer and the silicon substrate; and

electrolyticaly plating a second metal layer on the first metal layer, wherein the first metal contact and first metal layer electrically couple the second metal layer to at least one doped region, wherein forming the aluminum paste comprises depositing an aluminum paste having a thickness of at least 0.5 microns.

According to the second aspect, it is provided a method for forming a contact region on a solar cell, the solar cell having a front side which faces the sun during normal operation, and a back side opposite the front side, the method comprising:

forming at least one contact opening through a first dielectric layer over a silicon substrate of the solar cell, the silicon substrate having at least one doped region;

electrolessly plating at least one nickel contact over at least one contact opening;

depositing an aluminum paste above at least one contact opening;

curing the aluminum paste to form a layer of aluminum;

annealing at least one nickel contact, layer of aluminum and the silicon substrate to a temperature of at least 550 °C; and

electrolyticly plating a second metal layer on the layer of aluminum, wherein the at least one nickel contact and layer of aluminum electrically couple the second metal layer to at least one doped region, wherein forming the aluminum paste comprises depositing an aluminum paste having a thickness of at least 0.5 microns.

According to the third aspect, it is provided a solar cell having a front side which faces the sun during normal operation, and a back side opposite the front side, the solar cell comprising:

a contact opening through a first dielectric layer and over a silicon substrate of the solar cell, the silicon substrate having at least one doped region;

a nickel contact formed over the at least one contact opening;

a first metal layer formed over the nickel contact, wherein the first metal layer is in electrical connection to the nickel contact,

5. The method of Claim 1, wherein heating the first metal contact, first metal layer and the silicon substrate comprises annealing the first metal contact, first metal layer and the silicon substrate.

6. The method of Claim 5, wherein the annealing temperature is at least 550 °C.

7. The method of Claim 1, wherein electrolyticly plating the second metal layer comprises electrolyticly plating a metal selected from the group consisting of copper, tin, aluminum, silver, gold, chromium, iron, nickel, zinc, ruthenium, palladium, and platinum.

8. A method for forming a contact region on a solar cell, the solar cell having a front side which faces the sun during normal operation, and a back side opposite the front side, the method comprising:

forming at least one contact opening through a first dielectric layer over a silicon substrate of the solar cell, the silicon substrate having at least one doped region;

electrolessly plating at least one nickel contact over at least one contact opening;

depositing an aluminum paste above at least one contact opening;

curing the aluminum paste to form a layer of aluminum;

annealing at least one nickel contact, layer of aluminum and the silicon substrate to a temperature of at least 550 °C; and

electrolyticly plating a second metal layer on the layer of aluminum, wherein the at least one nickel contact and layer of aluminum electrically couple the second metal layer to at least one doped region, wherein forming the aluminum paste comprises depositing an aluminum paste having a thickness of at least 0.5 microns.

9. The method of Claim 8, wherein forming at least one contact opening through the first dielectric layer comprises performing a method selected from the group consisting of wet-etching and laser ablation.