Patent Claims:

1. A device for electrically contacting a solar cell during a measurement of electrical characteristics of the solar cell, wherein the solar cell is embodied with a multiplicity of finger electrodes on a solar cell surface, the device comprising

- at least one measuring strip extending between two measuring strip end sections in a measuring strip extension direction, wherein the measuring strip has at least one contact terminal for electrical contacting with a solar cell test device,

- a plurality of contact spring sections arranged on the measuring strip along the measuring strip extension direction, wherein each contact spring section is configured to electrically contact at least one finger electrode by spring-elastic mechanical contact when the measuring strip is placed onto the solar cell surface, with the measuring strip extension direction oriented transversely with respect to the finger electrodes, and

- a measuring frame having frame edge struts situated opposite one another, which, with the frame edge struts, engages around an area that is greater than or equal to a solar cell to be measured,

characterized in that

the measuring strip and the contact spring sections are embodied from the same material and integrally, wherein each contact spring section is embodied in a looped or hooked fashion as viewed transversely with respect to the measuring strip extension direction, and in that the measuring frame has a mechanical tension device, in which the measuring strip is clamped under tensile stress between the frame edge struts situated opposite one another.

2. The device as claimed in claim 1, characterized in that each measuring strip is embodied as a metal sheet having a thickness of between 0.2 to 1.5 mm, preferably 0.3 to 1.0 mm, more preferably 0.4 to 0.7 mm.

3. The device as claimed in claim 1 or 2, characterized in that the contact spring sections are arranged as wire-like elements periodically along the measuring strip extension direction along a lower edge of the measuring strip.

4. The device as claimed in any of the preceding claims, characterized by at least two measuring strips arranged with their measuring strip extension directions parallel to one another, and wherein the at least two measuring strips are clamped as a combination measuring strip into the mechanical tension device.

5. The device as claimed in claim 4, characterized in that the at least two measuring strips are arranged in a manner electrically insulated from one another.

6. The device as claimed in claim 4 or 5, characterized in that two measuring strips, from the at least two measuring strips, clamped parallel have contact spring sections arranged offset with respect to one another as viewed perpendicular to the measuring strip extension direction.

7. The device as claimed in any of the preceding claims, characterized in that the contact spring sections are laser-cut and/or stamped from the measuring strip.

8. A method for measuring electrical characteristics of a solar cell, comprising the following steps:

- providing a device as claimed in claim 1 having a plurality of measuring strips,
- providing the solar cell to be measured having a solar cell surface and finger electrodes arranged on the solar cell surface, and
- mechanically contacting the finger electrodes on the solar cell surface with the contact spring sections of the measuring strips,

- emitting a flash of light at the solar cell surface,
- tapping off an electric current that is generated by the flash of light and flows through the finger electrodes by means of the contact spring sections of one measuring strip and
- tapping off an electrical voltage as a measurement signal by way of the contact spring sections of the other measuring strip, and
- measuring and evaluating the tapped-off electric current and measuring the tapped-off electrical voltage by means of the device.

9. The method of claim 8, wherein providing a device as claimed in claim 1 comprises providing a device as claimed in claim 2.

10. The method of claim 8, wherein providing a device as claimed in claim 1 comprises providing a device as claimed in any one of claims 3 to 7.

11. The method as claimed in any one of claims 8 to 10, characterized in that a number of the measuring strips and the positioning thereof on the solar cell surface of the solar cell to be measured are chosen in such a way that the number and the position of the measuring strips correspond to the number and position of cell connectors between two solar cells to be interconnected to form a solar cell string.

12. The method as claimed in claim 11 when dependent on claim 9, characterized in that the thickness of the measuring strips as viewed transversely with respect to the measuring strip extension direction is chosen so as to correspond to a thickness of the cell connectors used in a solar module that is intended to be constructed from a plurality of the solar cells to be measured which are interconnected to form a solar cell string in said solar module.

13. The method as claimed in either of claims 11 and 12, characterized in that each measuring strip is embodied as a combination measuring strip composed of at least three measuring strips which are electrically insulated from one

another and which are arranged parallel to one another, wherein at least two of the measuring strips are used for measuring the electric current that is generated by the flash of light and flows through the finger electrodes, and at least one of the measuring strips is used for measuring the electrical voltage generated by the flash of light.