

*Prototype Product

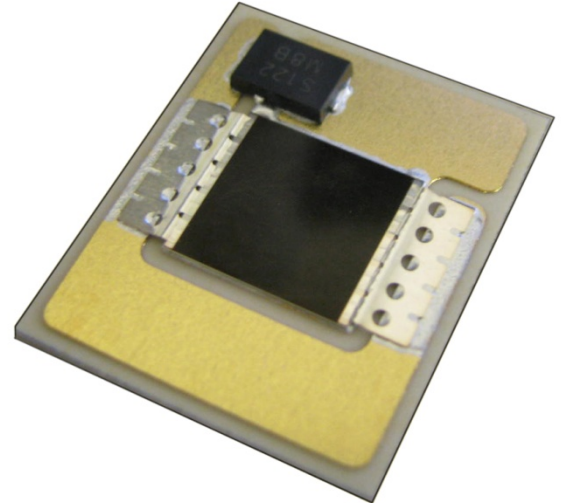
CCA 100 C3MJ Concentrator Cell Assembly

A concentrator cell assembly (CCA) consists of a Spectrolab state of the art triple junction solar cell and a bypass diode attached to a ceramic substrate. This assembly provides a robust package for easy integration into a solar concentration system.

The ceramic substrate offers excellent thermal conductivity and a compatible coefficient of thermal expansion with the solar cell. High current carrying interconnects are attached to the solar cell using Spectrolab's proprietary welding process.

Large solderable and weldable surfaces are provided for attachment of wire leads or connectors.

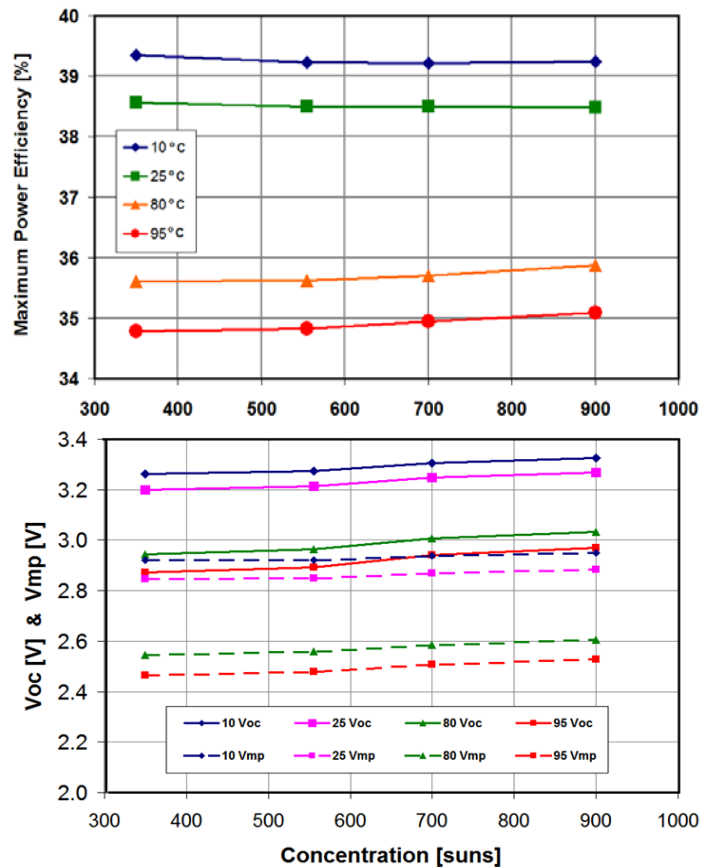
The cell is attached to the ceramic substrate virtually void free using a proprietary process that is designed for efficient heat transfer away from the solar cell surface.

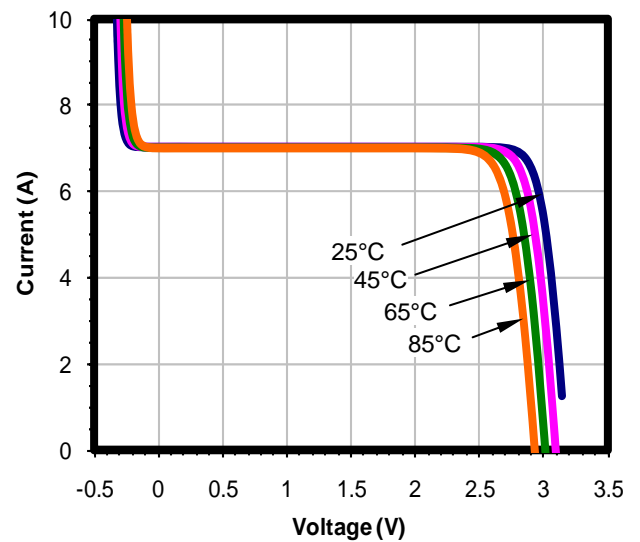
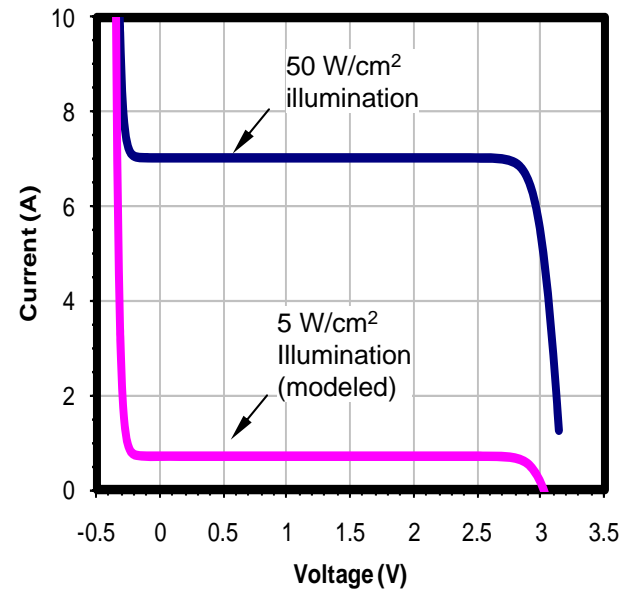
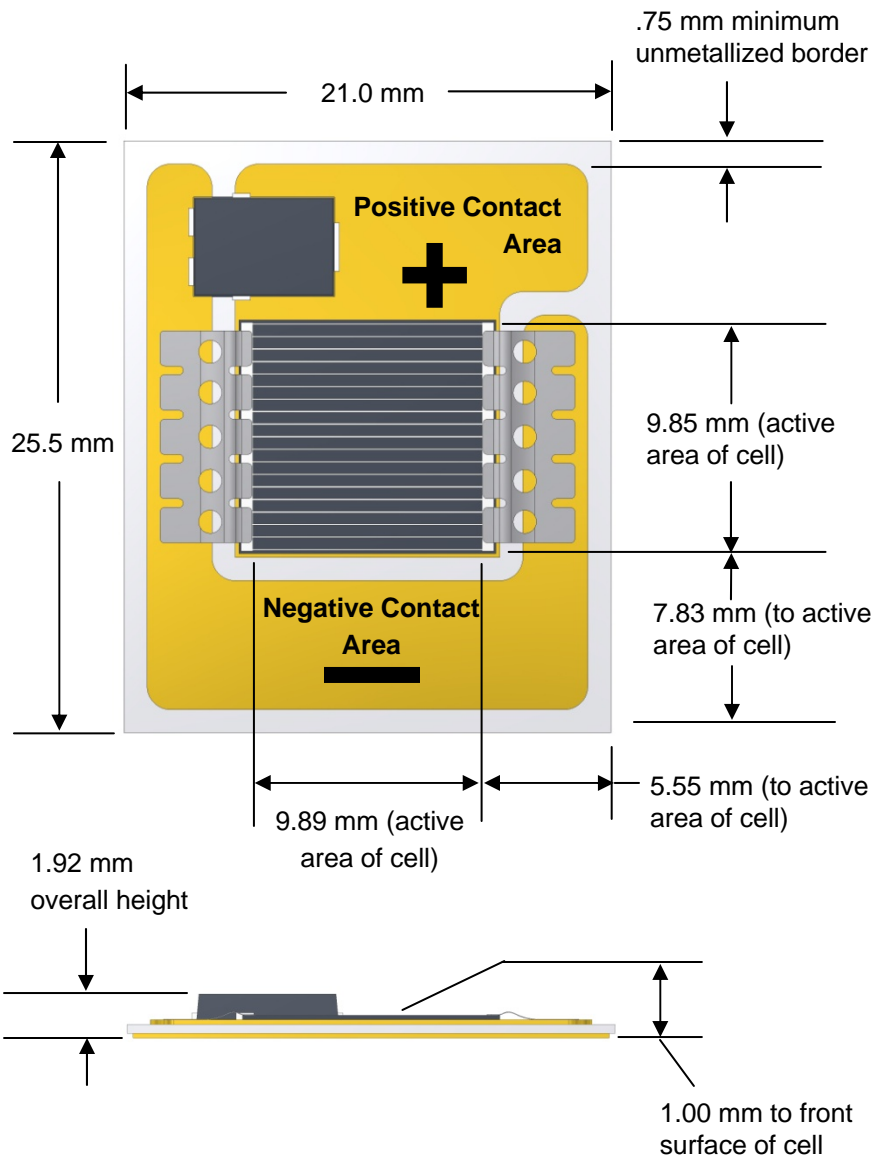


Specifications

Cell	CDO 100, C3MJ Typical performance efficiency: 38.5%
Cell aperture	98.9mm ²
Ceramic Carrier	Direct bonded copper with Au/Ni surface plating (front and back surfaces) on a Al ₂ O ₃ substrate
Diode	12A Schottky
Operating temp	-40°C to 100°C
Maximum temp	180°C
Thermal resistance	≤ 0.22°C/W (modeled)

*These CCAs are considered prototypes because they have not completed Spectrolab's internal qualification process and are considered experimental.





ISO 9001 certified

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Specifications subject to change without notice.

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