

# CBC-PV-01 Photovoltaic Cell

## 2-Series Amorphous Silicon Solar Cell

### Features

- Amorphous silicon solar cell
- Glass substrate
- 2-series cell configuration
- Compatible with Cymbet's energy harvesting, power management, and energy storage products
- 58.1mm x 56.7mm x 1.1mm dimensions

### Applications

- Energy harvesting systems
- Wireless sensor networks
- Low power radios, microcontrollers, and sensors

### Configurations

- CBC-PV-01 has connector on lead wires
- CBC-PV-01N has no connector attached to lead wires

### Description

The CBC-PV-01 photovoltaic cell is a low voltage amorphous silicon solar cell on a glass substrate. Typical operating voltage is 0.8V with an output current of approximately 200μA at 200Lux in fluorescent light. The CBC-PV-01 is used in low power systems including wireless sensors and sensor networks.

The CBC-PV-01 is compatible with Cymbet's energy harvesting products including the CBC915 Energy Processor, CBC-EVAL-09 development kit and EnerChip solid state rechargeable storage devices.

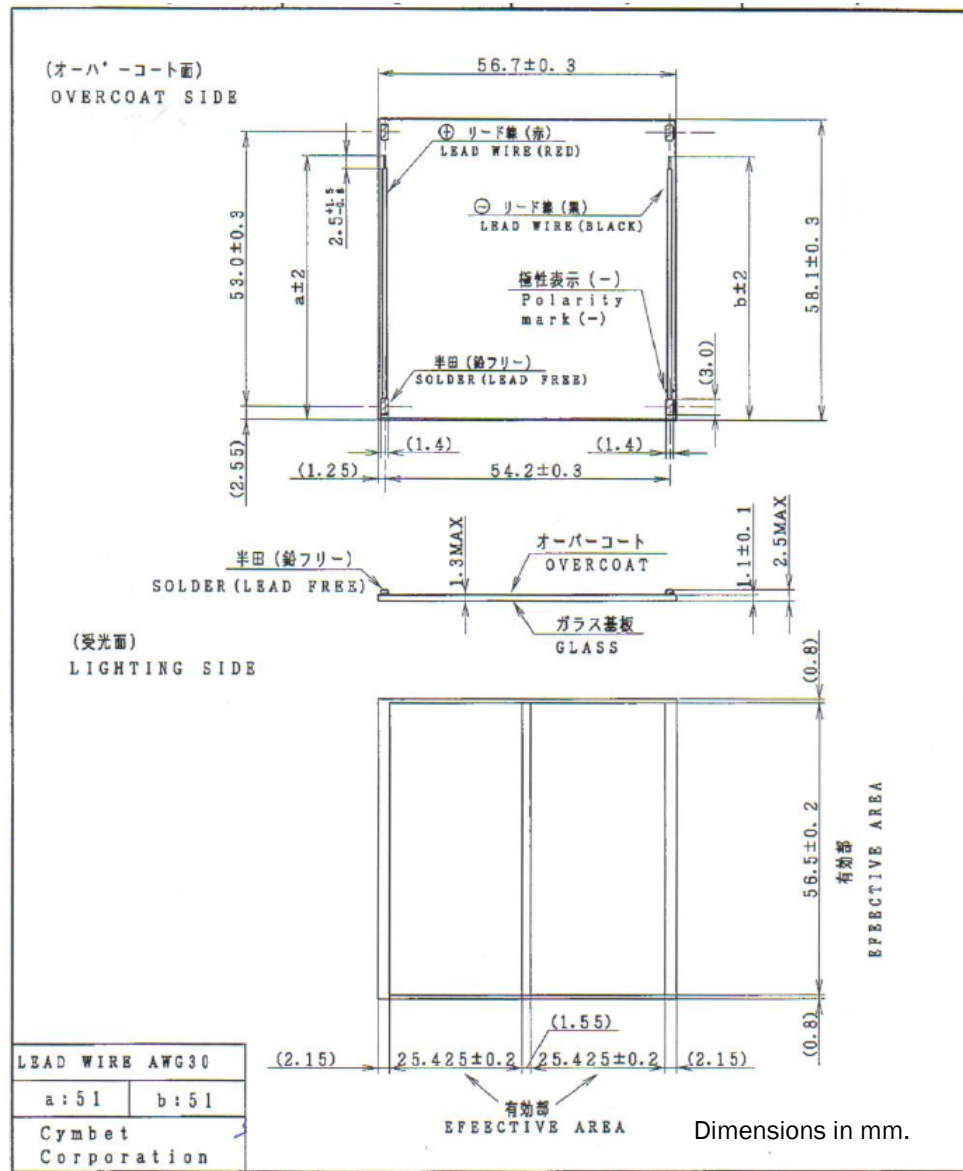
The CBC-PV-01 operating characteristics are given in detail in the following table.

## CBC-PV-01 Operating Characteristics

Specification	Symbol	Condition	Min	Typ	Max	Units
Open Circuit Voltage	Voc	200Lux FL <sup>(1)</sup> , 25 °C	---	1.2	---	V
Short Circuit Current	Isc	200Lux FL <sup>(1)</sup> , 25 °C	---	212	---	μA
Operating Voltage and Operating Current	Vope and Iope	200Lux FL <sup>(1)</sup> , 25 °C	---	0.8 201	---	V μA
Working Temperature	Tw	---	-10	---	60	°C
Storage Temperature	Ts	---	-20	---	70	°C
Working Illuminance Range	Lw	---	---	1000	---	Lux
Outside Dimensions	Length Width Thickness	---	---	58.1 56.7 1.1	---	mm

<sup>(1)</sup> FL: White fluorescent light.

## CBC-PV-01 Mechanical Drawing



## Ordering Information

Part Number	Description	Notes
CBC-PV-01	Solar Cell with connector	Shipped in Boxes
CBC-PV-01N	Solar Cell without connector	Shipped in Boxes

**Disclaimer of Warranties; As Is**

The information provided in this data sheet is provided "As Is" and Cymbet Corporation disclaims all representations or warranties of any kind, express or implied, relating to this data sheet and the Cymbet battery product described herein, including without limitation, the implied warranties of merchantability, fitness for a particular purpose, non-infringement, title, or any warranties arising out of course of dealing, course of performance, or usage of trade. Cymbet battery products are not approved for use in life critical applications. Users shall confirm suitability of the Cymbet battery product in any products or applications in which the Cymbet battery product is adopted for use and are solely responsible for all legal, regulatory, and safety-related requirements concerning their products and applications and any use of the Cymbet battery product described herein in any such product or applications.

**Cymbet, EnerChip and the Cymbet Logo are Cymbet Corporation Trademarks**