

Preliminary

# **CBC-PV-02** 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
- 67.3mm x 26.7mm x 1.1mm dimensions

### Applications

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

### Configurations

- CBC-PV-02 has connector on lead wires
- CBC-PV-02N has no connector attached to lead wires

### Description

The CBC-PV-02 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 110µA at 200Lux in fluorescent light. The CBC-PV-02 is used in low power systems including wireless sensors and sensor networks.

The CBC-PV-02 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.

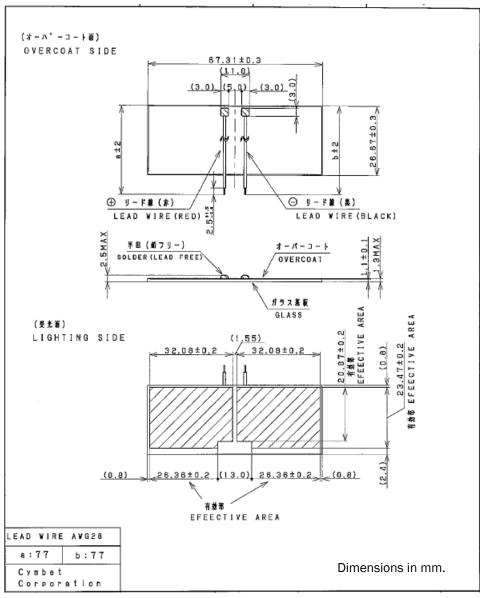
The CBC-PV-02 operating characteristics are given in detail in the following table.

Specification	Symbol	Condition	Min	Тур	Max	Units
Open Circuit Voltage	Voc	200Lux FL <sup>(1)</sup> , 25°C		1.2		V
Short Circuit Current	lsc	200Lux FL <sup>(1)</sup> , 25°C		116		μA
Operating Voltage and Operating Current	Vope and Iope	200Lux FL <sup>(1)</sup> , 25°C		0.8 110		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			67.3 26.7 1.1		mm

## **CBC-PV-02** Operating Characteristics

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

### **CBC-PV-02** Mechanical Drawing



### **Ordering Information**

Part Number	Description	Notes	
CBC-PV-02	Solar Cell with connector	Shipped in Boxes	
CBC-PV-02N	Solar Cell without connector	Shipped in Boxes	

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