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.

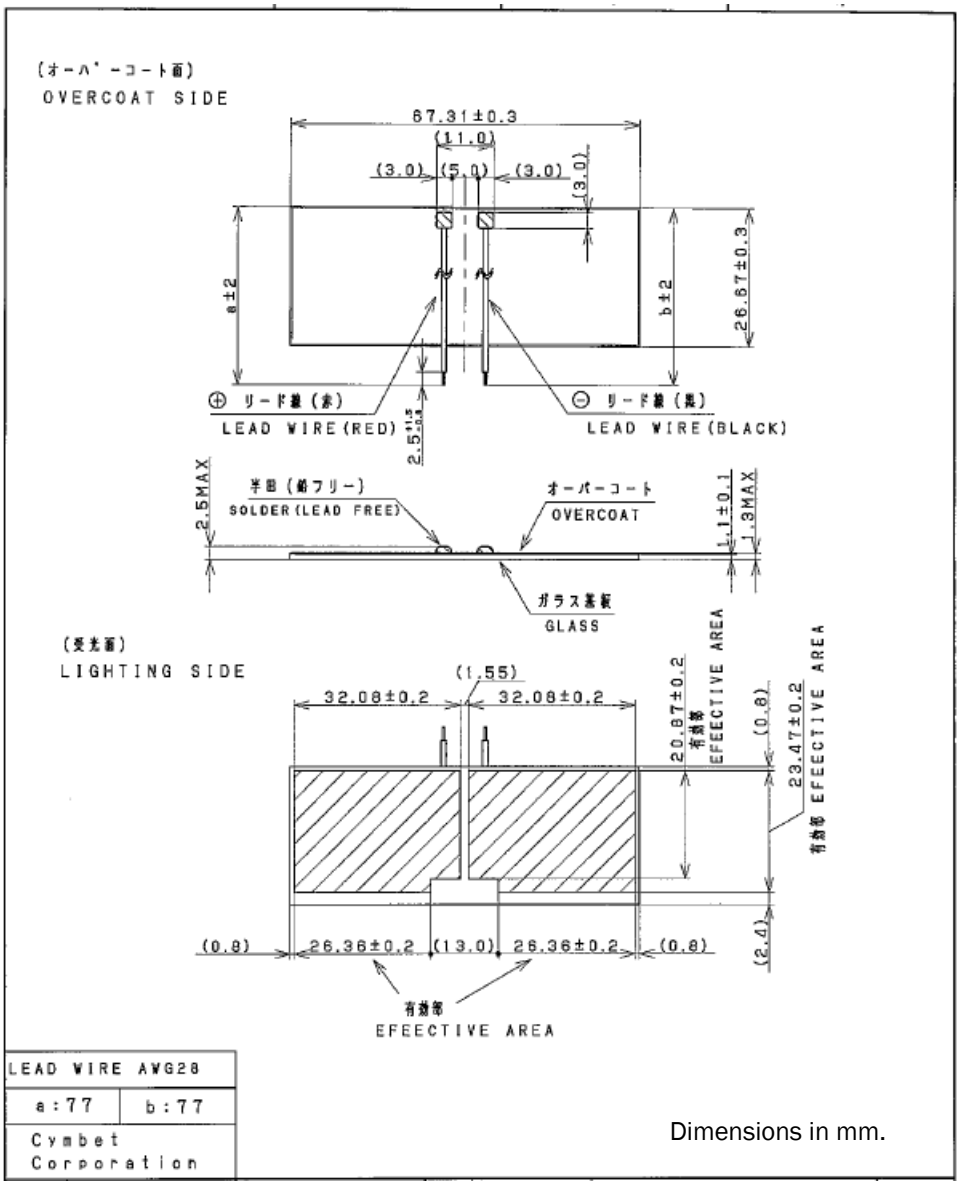
The CBC-PV-02 operating characteristics are given in detail in the following table.

CBC-PV-02 Operating Characteristics

Specification	Symbol	Condition	Min	Typ	Max	Units
Open Circuit Voltage	Voc	200Lux FL(1), 25°C	---	1.2	---	V
Short Circuit Current	Isc	200Lux FL(1), 25°C	---	116	---	µA
Operating Voltage and Operating Current	Vope and Iope	200Lux FL(1), 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

(1) 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