

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 200 μ A 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.

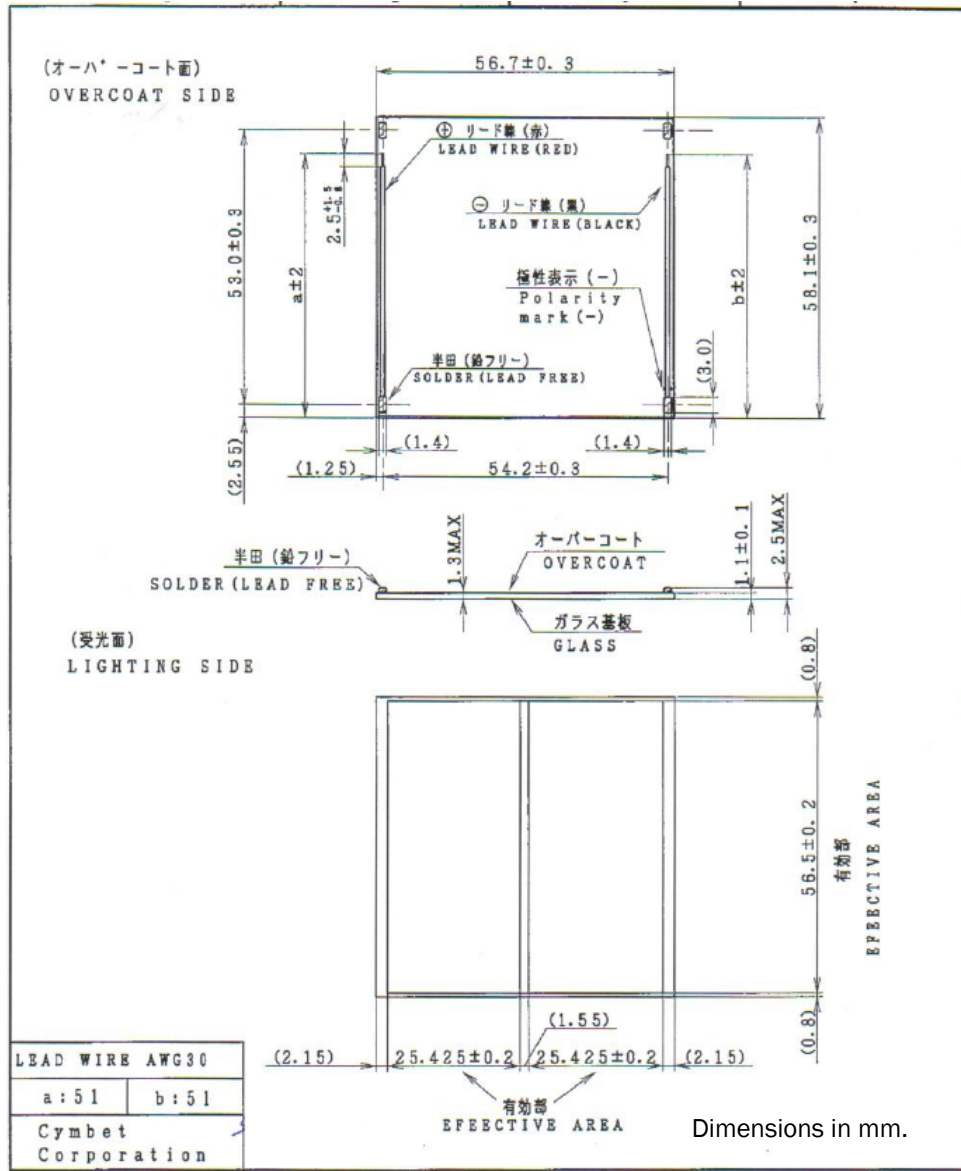
The CBC-PV-01 operating characteristics are given in detail in the following table.

CBC-PV-01 Operating Characteristics

| Specification | Symbol | Condition | Min | Typ | Max | Units |
|---|---------------------------------------|----------------------------------|-----|---------------------|-----|--------------|
| Open Circuit Voltage | Voc | 200Lux FL ⁽¹⁾ , 25 °C | --- | 1.2 | --- | V |
| Short Circuit Current | Isc | 200Lux FL ⁽¹⁾ , 25 °C | --- | 212 | --- | μ A |
| Operating Voltage and Operating Current | Vo _{pe} and I _{ope} | 200Lux FL ⁽¹⁾ , 25 °C | --- | 0.8 201 | --- | V μ A |
| Working Temperature | T _w | --- | -10 | --- | 60 | °C |
| Storage Temperature | T _s | --- | -20 | --- | 70 | °C |
| Working Illuminance Range | L _w | --- | --- | 1000 | --- | Lux |
| Outside Dimensions | Length Width Thickness | --- | --- | 58.1 56.7 1.1 | --- | mm |

⁽¹⁾ 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 |

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