### SUNPOWER

# **B50 SOLAR CELL**MONO CRYSTALLINE SILICON

#### **Physical Characteristics**

Construction: All-back contact

Dimensions: 125mm x 125mm - nominal

Thickness: 175  $\mu$ m  $\pm$  40  $\mu$ m

## ELECTRICAL CHARACTERISTICS OF TYPICAL CELL AT STANDARD TEST CONDITIONS (STC)

STC is defined as: irradiance of 1000W/m², spectrum AM 1.5g and cell temperature of 25°C

Open Circuit Voltage: 0.670 V
Short Circuit Current: 5.9 A
Maximum Power Voltage: 0.560 V
Maximum Power Current: 5.54 A
Rated Power: 3.1 W
Efficiency: Up to 21.8%

#### **Un-laminated Cell Temperature Coefficients**

Voltage:  $-1.9 \text{ mV} / ^{\circ}\text{C}$ Power:  $-0.38\% / ^{\circ}\text{C}$ 

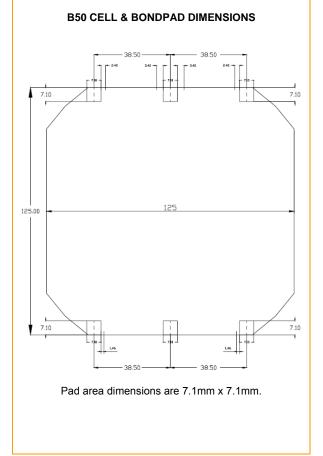
#### **ATTRIBUTES**

- High efficiency reduces module assembly and system installation costs
- Uniform front appearance no contact grid
- Back contact design simplifies circuit assembly
- Lower temperature coefficient improves energy delivery

#### **PACKAGING**

- Cells are packed in boxes of 1000 each; grouped in shrink-wrapped stacks of 100 with interleaving
- Twelve boxes are packed in a water-resistant "Master Carton" containing 12,000 cells suitable for air transportation

#### **B50 CELL PERFORMANCE - TYPICAL I-V CURVE** 7.0 6.0 Current (A) 5.0 4.0 3.0 2.0 1.0 0.0 0.2 0.4 0.6 0.0 8.0 Voltage (V)



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