

BENEFITS

Maximum Light Capture

SunPower's all-back contact cell design moves gridlines to the back of the cell, leaving the entire front surface exposed to sunlight, enabling up to 10% more sunlight capture than conventional cells.

Superior Temperature Performance

Due to lower temperature coefficients and lower normal cell operating temperatures, our cells generate more energy at higher temperatures compared to standard c-Si solar cells.

No Light-Induced Degradation

SunPower n-type solar cells don't lose 3% of their initial power once exposed to sunlight as they are not subject to light-induced degradation like conventional p-type c-Si cells.

Broad Spectral Response

SunPower cells capture more light from the blue and infrared parts of the spectrum, enabling higher performance in overcast and low-light conditions.

Broad Range Of Application

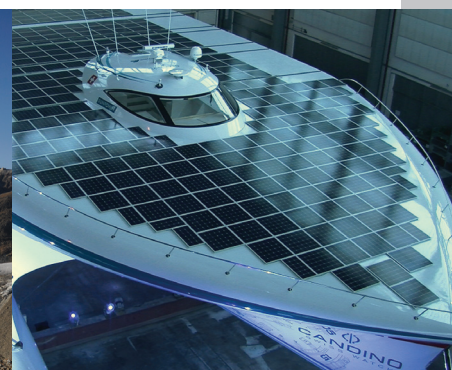
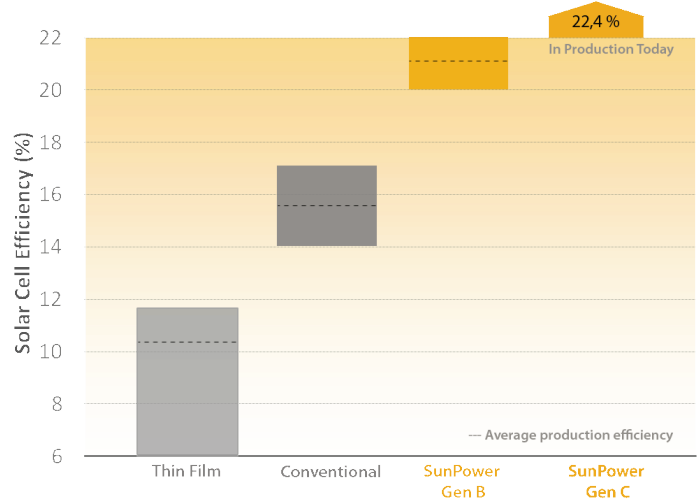
SunPower cells provide reliable performance in a broad range of applications for years to come.

The SunPower™ C60 solar cell with proprietary Maxison™ cell technology delivers today's highest efficiency and performance.

The anti-reflective coating and the reduced voltage-temperature coefficients provide outstanding energy delivery per peak power watt. Our innovative all-back contact design moves gridlines to the back of the cell, which not only generates more power, but also presents a more attractive cell design compared to conventional cells.



SunPower's High Efficiency Advantage



Electrical Characteristics of Typical Cell at Standard Test Conditions (STC)

STC: 1000W/m², AM 1.5g and cell temp 25°C

| Bin | P _{mp} (Wp) | Eff. (%) | V _{mp} (V) | I _{mp} (A) | V _{oc} (V) | I _{sc} (A) |
|-----|----------------------|----------|---------------------|---------------------|---------------------|---------------------|
| G | 3.34 | 21.8 | 0.574 | 5.83 | 0.682 | 6.24 |
| H | 3.38 | 22.1 | 0.577 | 5.87 | 0.684 | 6.26 |
| I | 3.40 | 22.3 | 0.581 | 5.90 | 0.686 | 6.27 |
| J | 3.42 | 22.5 | 0.582 | 5.93 | 0.687 | 6.28 |

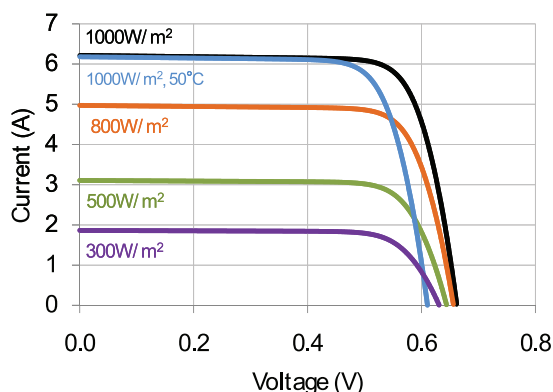
All Electrical Characteristics parameters are nominal
Unlaminated Cell Temperature Coefficients

Voltage: -1.8 mV / °C Power: -0.32% / °C

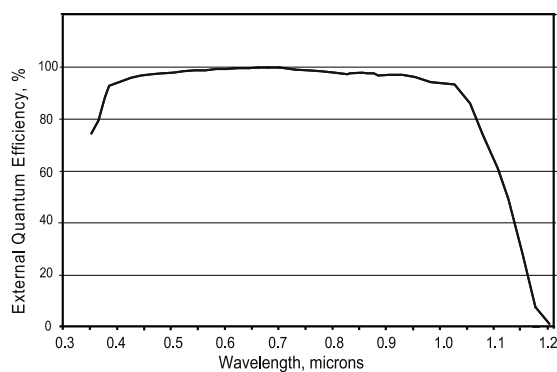
Positive Electrical Ground

Modules and systems produced using these cells must be configured as "positive ground systems".

TYPICAL I-V CURVE



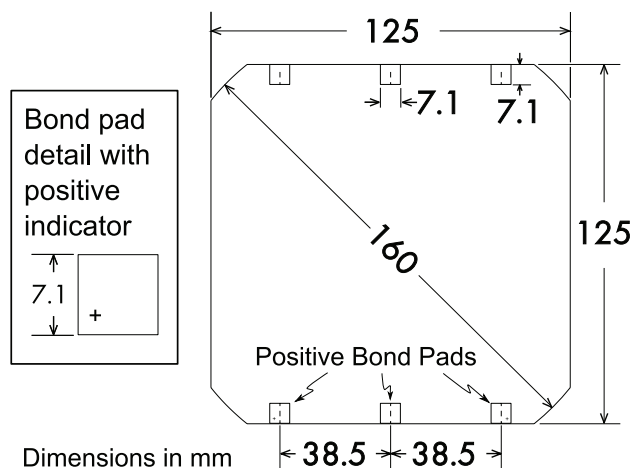
SPECTRAL RESPONSE



Physical Characteristics

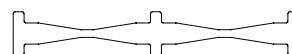
| | |
|---------------|-------------------------|
| Construction: | All back contact |
| Dimensions: | 125mm x 125mm (nominal) |
| Thickness: | 165µm ± 40µm |
| Diameter: | 160mm (nominal) |

Cell and Bond Pad Dimensions



Bond pad area dimensions are 7.1 mm x 7.1 mm
Positive pole bond pad side has "+" indicator on leftmost and rightmost bond pads.

Interconnect Tab and Process Recommendations



Tin plated copper interconnect. Compatible with lead free process.

Packaging

Cells are packed in boxes of 1,200 each; grouped in shrink-wrapped stacks of 150 with interleaving. Twelve boxes are packed in a water-resistant "Master Carton" containing 14,400 cells suitable for air transport.

Interconnect tabs are packaged in boxes of 1,200 each.

About SunPower

SunPower designs, manufactures, and delivers high-performance solar electric technology worldwide. Our high-efficiency solar cells generate up to 50 percent more power than conventional solar cells. Our high-performance solar panels, roof tiles, and trackers deliver significantly more energy than competing systems.