

High Efficiency Solar Cell

Maxeon[®] Technology

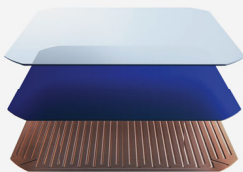
Every day, entrepreneurs, designers, adventurers and explorers are changing the way our world is powered by placing their trust in Maxeon technology. We share your spirit of excellence and relentless innovation, which is reflected in most powerful and durable cell to solar enthusiasts. Together, even the boldest goals are within reach.



Highest Power Cell

SunPower's new Maxeon[®] Gen 5 cell is 65% larger than prior generations, delivering to your project the most powerful cell available on the commercial market.

Fundamentally Different. And Better.



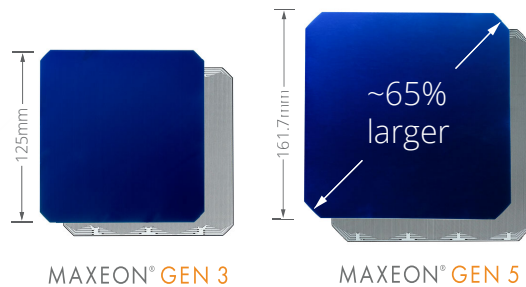
Maxeon[®] Technology

- Ultra-pure, n-type, monocrystalline silicon for maximum power
- Tin barrier prevents corrosion
- Uniquely durable back-contact design with no ribbons
- Clean and elegant aesthetics by designing out front contacts



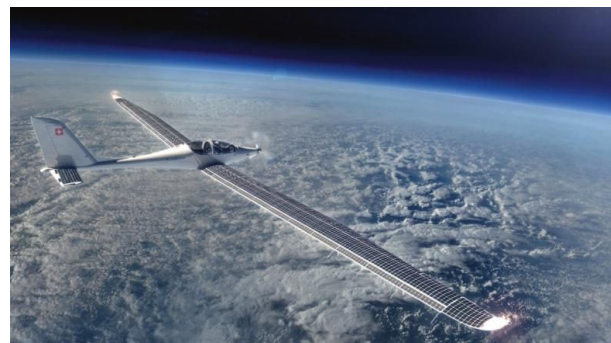
Trusted Durability

- Solid metal foundation helps cell bend where others break under pressure.
- Conductive and malleable foundation keeps cell electrically intact even if eventually cracked.



Born to Break Records

Maxeon cells powered the first solar circumnavigation of the planet by air and by sea. They are the chosen technology of pioneers who demand the best in harsh environments.



Proven Technology Platform

SunPower has deployed more than one billion cells across more than 9 GW of installed solar - with a very low warranty return rate of 0.005%. SunPower's industry-leading R&D team has invested deeply in generations of incremental design enhancements over three decades.

Maxeon® Gen 5 High Efficiency Solar Cell

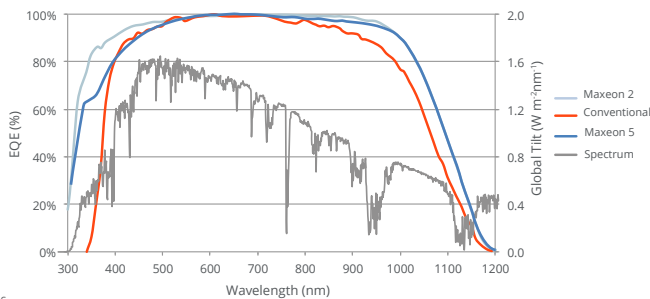
Electrical Characteristics of a typical Maxeon Gen 5 Cell

	Cell Bin	Pmpp (Wp)	Eff. (%)	Vmpp (V)	Impp (A)	Voc (V)	Isc (A)
Max Peak Performance	Mn1	6.47	25.1	0.630	10.28	0.731	10.98
Max Premium Performance	Ln	6.33	24.5	0.620	10.22	0.730	10.96
Max High Performance	Kn	5.84	22.6	0.591	9.88	0.730	10.71

Electrical parameters are nominal values.

Temp Coefficients in SunPower Panels: Voltage: -1.74mV/°C,
Current: 2.9mA/°C, Power: -0.29%/°C

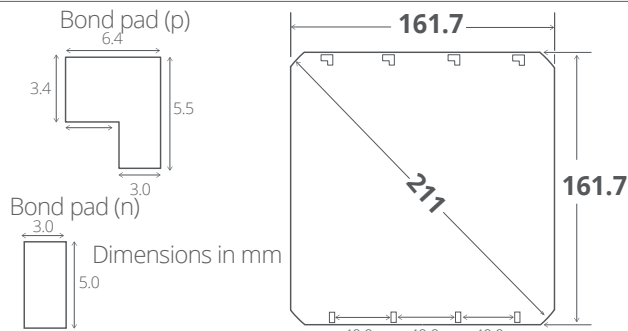
Spectral Response



References
Conventional: Green, M.a., Emery, K., Hishikawa, Y., & Warta, W. (2010). Solar cell efficiency tables (version 36). Progress in Photovoltaics: Research and Applications, 18(5), 46-352. doi:10.1002/pip/1021
SunPower: NREL data, commissioned by SPWR. "Gen C CS AR bin1". 2013.
Spectrum: Standard, ASTM. "G173-03." URL: <http://www.astm.org>

Cell Physical Characteristics

Wafer: Monocrystalline silicon
Design: All back contact
Front: Uniform, black antireflection coating
Back: Tin-coated, copper metal grid
Cell Area: Approximately 258.3cm²
Cell Weight: Approximately 11.6 grams
Cell Thickness: 151µm +/- 6µm

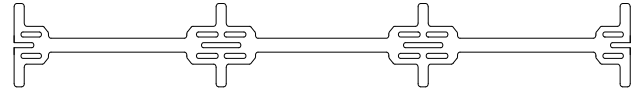


Bond pad area dimensions are 5.0mm x 3.0mm (npad)
Bond pad area dimensions are 5.5mm x 3.0mm (ppad)
Metal finger pitch between positive and negative fingers is 471µm

Positive Electrical Grounding

If cell voltage is below frame ground the cell power output will be reduced. Therefore, modules and systems produced using these cells should be configured as "positive ground systems." If this creates a problem, please consult with SunPower.

Interconnect Tab and Process Recommendations



SunPower recommends customers use SunPower's patented tin-plated copper strain-relieved interconnect tabs, which can be purchased from SunPower. These interconnects are easily solderable and compatible with lead free processing. Tabs weigh approximately 0.5 grams.

Our patented interconnect tabs are packaged in reeled format or 15,000 each.

<http://us.sunpower.com/about/sunpower-technology/patents/>

Production Quality

ISO 9001:2015 certified

Soft handling procedures to reduce breakage and crack formation

100% cell performance testing and visual inspection

Packaging

Cells are packed in boxes of 1200 each; grouped in 8 shrink wrapped stacks of 150 with interleaving. 30 boxes are packed in a water-resistant "Master Carton" containing 36,000 cells suitable for air transport.

Purchase Terms

Customers shall not reverse engineer, disassemble or analyze the Solar Cells or any prototype, process, product, or other item that embodies Confidential Information of SunPower. Customers shall not cause or allow any inspection, analysis, or characterization of any properties (whether mechanical, structural, chemical, electrical, or otherwise) of the Solar Cells, whether by itself or by a third party.

Customer agrees that it will not transfer (whether by sale, loan, gift, or other conveyance) the Solar Cells from its possession.

SunPower solar cells are provided "AS IS" without warranty.

Full terms and conditions are in the Cell Purchase Agreement

SUNPOWER®

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