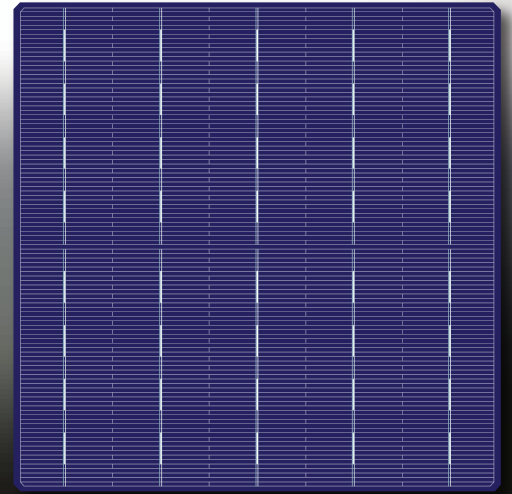


Super19 Series Ultra-Efficient

NP6W

Multi-Crystalline Solar Cell by Black Silicon



Features

- Ultra-efficient solar cells with an isotropically etched surface
- Silicon nitride anti-reflection coating
- Silver front contact bars and aluminum local back surface field

Performance and Quality

- Proper handling from incoming inspection through production, outgoing inspection and packaging
- 100% checked for reverse current and visual appearance
- Calibrated against Fraunhofer ISE
- RoHS compliance
- **100% PID Resistance**

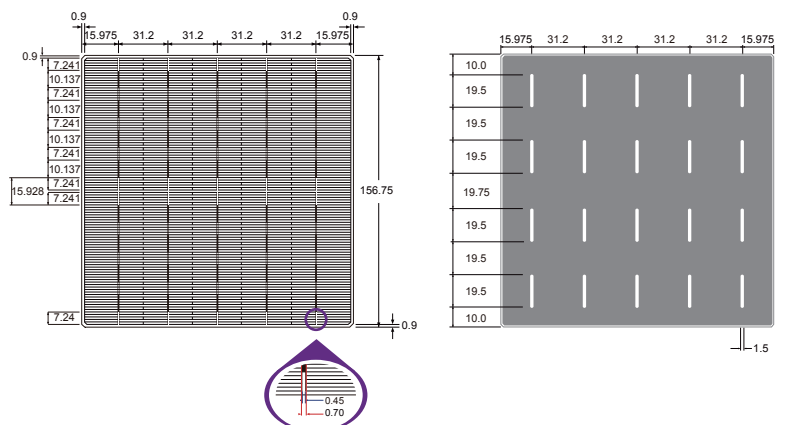
Packaging

- Minimize the risk of broken cells with special design
- Label with product information

Physical Characteristics

Dimension	156.75 mm x 156.75 mm $\pm$ 0.25 mm
Cell's Thickness (si)	200 μ m $\pm$ 30 μ m
Front Side (-)	Silicon nitride anti-reflection coating 0.7 mm silver busbar
Back Side (+)	Aluminum local back surface field 1.5 mm (silver) discontinuous soldering pads

Cell Layout



Multi-Crystalline Solar Cell by Black Silicon

NP6W Ultra-Efficient



Electrical Characteristics

Class	Efficiency Range (%)	Rated Power (Wp)	*Maximum Power Current (A)	*Short Circuit Current (A)	*Maximum Power Voltage (V)	*Open Circuit Voltage (V)
193	19.3-19.4	4.742	8.850	9.361	0.538	0.639
194	19.4-19.5	4.767	8.871	9.383	0.540	0.640
195	19.5-19.6	4.791	8.892	9.405	0.541	0.641
196	19.6-19.7	4.816	8.914	9.426	0.542	0.643
197	19.7-19.8	4.840	8.935	9.448	0.543	0.644
198	19.8-19.9	4.865	8.956	9.470	0.545	0.645
199	19.9-20.0	4.890	8.972	9.488	0.547	0.647
200	20.0-20.1	4.914	8.994	9.510	0.548	0.649
201	20.1-20.2	4.939	9.016	9.533	0.549	0.650
202	20.2-20.3	4.963	9.041	9.559	0.550	0.652
203	20.3-20.4	4.988	9.064	9.583	0.552	0.653
204	20.4-20.5	5.012	9.085	9.603	0.553	0.654
205	20.5-20.6	5.037	9.106	9.624	0.554	0.655

Test condition : 1000 W / m², AM 1.5, 25°C Power measuring tolerance: ±1.5% rel.

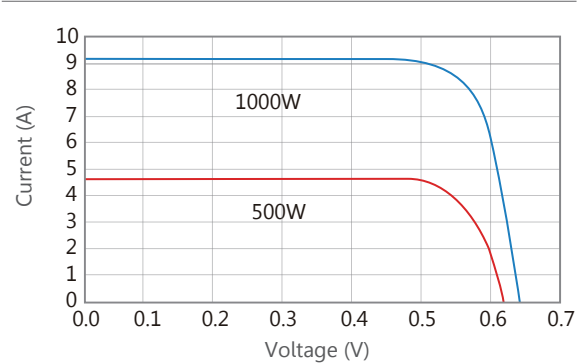
Temperature coefficients

Current (%/K)	0.0535
Voltage (%/K)	-0.3043
Power (%/K)	-0.3718

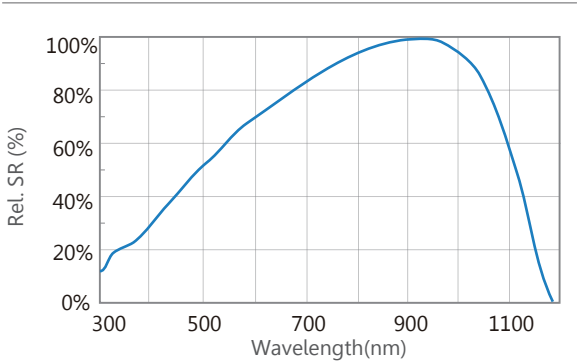
Light Intensity Dependence

Intensity [W/m ²]	Vmpp	Ippp
1000	1.000	1.000
900	0.998	0.899
500	0.977	0.497
300	0.955	0.297
200	0.936	0.197

IV-Curve



Spectral Response



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*The datasheet is for informational purposes only and subject to change without prior notice.