

182 Monocrystalline Bifacial PERC Solar Cell

S18210BB023

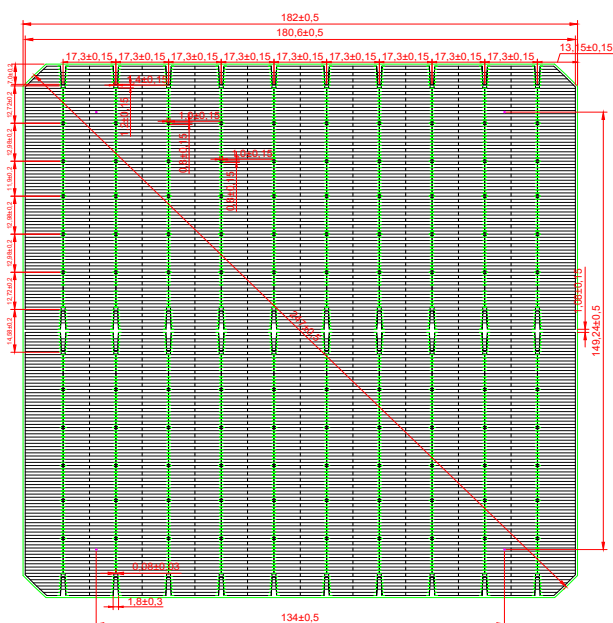
FEATURES

- Ultra-Efficient solar cells with an anisotropically etched surface
- Low pressure diffusion with good uniformitySilver
- front contact bars and aluminum local back surface file
- Silicon nitride anti-reflection coating

Physical Characteristics

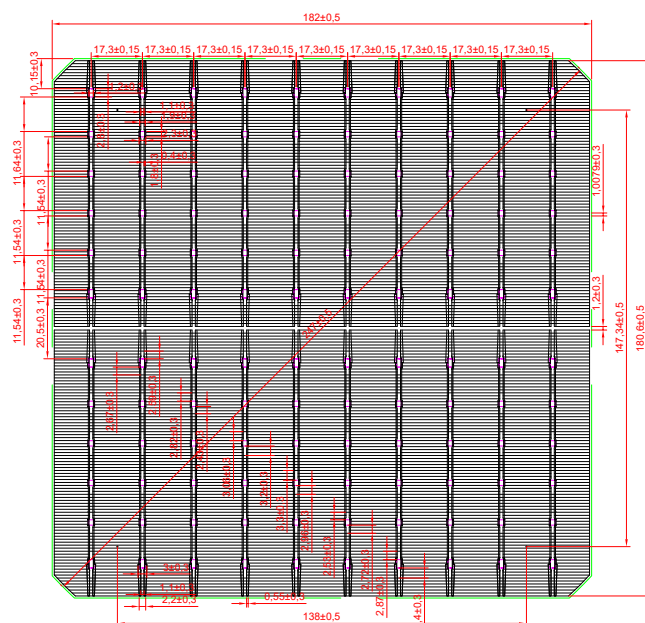
Substrate material	P-type mono-crystalline silicon wafer-PERC
Cell thickness	160 μ m \pm 16 μ m
Dimension	182mm*182mm \pm 0.5mm
Diagonal	247mm \pm 0.5mm
Front (-)	10*0.08mm \pm 0.03mm bus bars (silver) 168 lines, Silicon oxide + blue silicon nitride compound anti-reflection coating(PID Free)
Back (+)	1.2 \pm 0.3mm wide soldering pads (silver) , Aluminum oxide and Aluminum lines back-surface field, Laser design of vertical bus bars

Product Appearance



182单晶-10BB (17.3间距)-168栅-正面图形

Front



182单晶-10BB (17.3间距)-180栅-12分段-背面图形

Back

Electrical Performance

Efficiency	%	23.2	23.1	23.0	22.9	22.8	22.7	22.6	22.5	22.4	22.3	22.2
Voc	V	0.688	0.687	0.686	0.685	0.684	0.683	0.682	0.681	0.680	0.679	0.678
Isc	A	13.623	13.592	13.563	13.534	13.503	13.478	13.453	13.428	13.403	13.381	13.359
Vmpp	V	0.598	0.597	0.596	0.595	0.594	0.593	0.592	0.591	0.590	0.589	0.588
Imp	A	12.808	12.774	12.741	12.706	12.672	12.638	12.604	12.569	12.534	12.500	12.465
Pmpp	W	7.66	7.63	7.59	7.56	7.53	7.49	7.46	7.43	7.40	7.36	7.33

Standard Test Conditions: 1000W/m², AM1.5, 25 °C
 Specifications subjects to technical changes and test

Temperature Coefficient

TkPower	-(0.39±0.02) %/k
TkVoltage	-(0.33±0.03) %/k
TkCurrent	+(0.06±0.015) %/k

Light induced degradation test

Using Xenon lamp (Irradiance of 1000W/m²,with spectrum AM 1.5) to irradiate test cells, after a total irradiation of 5 kwh/m² ,the degradation of maximum output power of cells is $\leq 1.5\%$.

CTM

Lower cell to module(CTM) power loss: $\leq 3\%$.

Anti-PID

Potential Induced Degradation(-1500V,192h): $\leq 5\%$

Packaging, Storage

Solar cells are closely packed with soft sponge around and heat shrink is used around the box unit. Outer packing box must have shock buffer, to be suitable for long-distance delivery.

After packaging, cells should be stored indoors in the conditions of good ventilation, dry, humidity below 60%, and temperature ≤ 40 °C . Cells should be sampling inspected again if the storage time over 45 days.