



Mono Silicon PERC Solar Cell ECM1010BSE2

ET-P-182-10BB-Bifacial Cell

PRODUCT ADVANTAGES

- 1** Adopt self-developed advanced PERC cell structure.
- 2** Large size silicon wafer with unique front fingers design.
- 3** 10BB design enhance the busbar strength of the cell, increases the power generating .
- 4** 65%~75% bifaciality rate leads to more power output of modules.
- 5** Fine binning method, effectively reducing the packaging loss of modules.
- 6** Excellent anti-PID performance, reduce power lose caused by harsh environments.

MECHANICAL DATA AND DESIGN

Dimension	182.2mm×182.2mm±0.25mm, Φ247mm±0.5mm
Thickness	170±17μm
Front (-)	Blue composite anti-reflection coating (Silicon dioxide+Silicon nitride);10 bus bars, 0.06±0.015mm width ; The front side of solar cell is designed as a half sheet; The number of the fingers is 170.
Back (+)	Alumina and silicon nitride composite passivation layer; 1.1±0.15mm width silver anode. The number of aluminum fingers is 180.

ELECTRIC PERFORMANCE PARAMETERS

Eta	Pmpp(W)	Ump(V)	I _{mp} (A)	U _{oc} (V)	I _{sc} (A)	FF(%)
23.5%	7.76	0.594	13.055	0.693	13.666	81.88
23.4%	7.73	0.593	13.037	0.692	13.656	81.80
23.3%	7.69	0.593	12.957	0.691	13.620	81.64
23.2%	7.66	0.592	12.941	0.690	13.603	81.62
23.1%	7.63	0.590	12.933	0.689	13.573	81.59
23.0%	7.59	0.589	12.887	0.687	13.557	81.50
22.9%	7.56	0.588	12.862	0.686	13.543	81.40
22.8%	7.53	0.586	12.834	0.685	13.512	81.25
22.7%	7.49	0.584	12.832	0.683	13.505	81.20
22.6%	7.46	0.581	12.818	0.681	13.496	81.03
22.5%	7.43	0.580	12.811	0.681	13.472	80.99

BACK ELECTRIC PERFORMANCE PARAMETERS

Eta	Range	Pmpp(W)	Ump(V)	I _{mp} (A)	U _{oc} (V)	I _{sc} (A)	FF(%)
16.5%	16.50% or more	5.45	0.564	9.659	0.657	10.436	79.45
16.0%	16.00%-16.50%	5.28	0.562	9.399	0.655	10.174	79.27
15.5%	15.50%-16.00%	5.12	0.560	9.138	0.653	9.917	79.02
15.0%	15.00%-15.50%	4.95	0.559	8.859	0.650	9.662	78.85

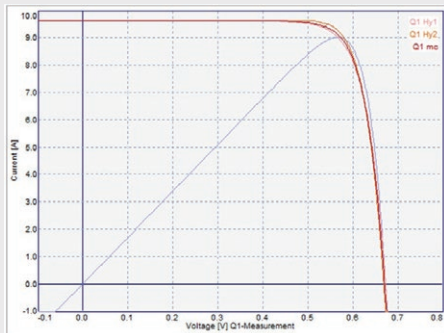
STANDARD TEST CONDITION

Illumination intensity	1000W/m ²
Spectrum	AM1.5G
Illumination intensity	25°C

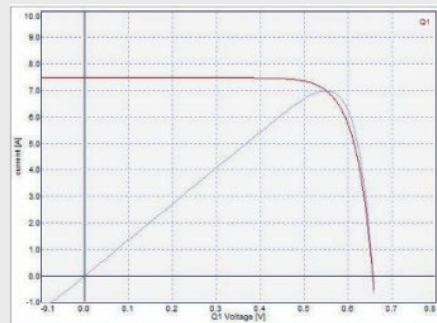
TEMPERATURE COEFFICIENTS

Open-circuit voltage temperature coefficient	-0.32%/K
Short-circuit current temperature coefficient	+0.05%/K
Max. power temperature coefficient	-0.48%/K

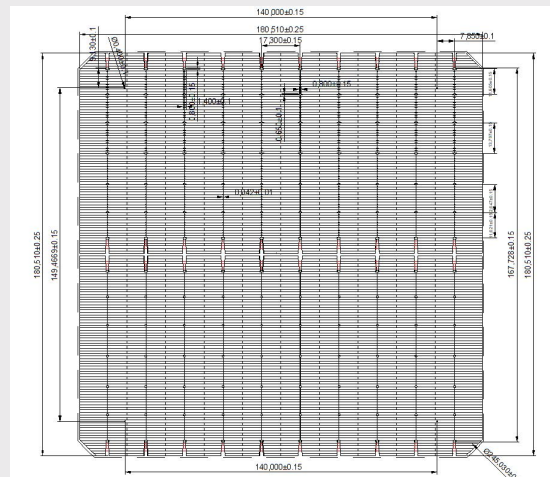
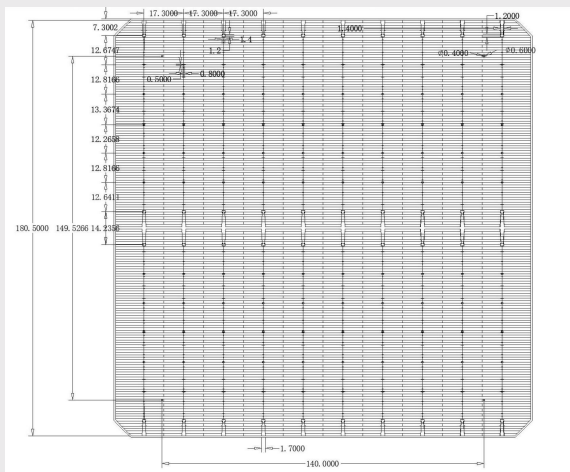
FRONT I/V CURVE



BACK I/V CURVE



PRODUCT APPEARANCE



The above technical parameters are subject to technical changes and tests, and EliTe Solar. reserves the right of final interpretation.