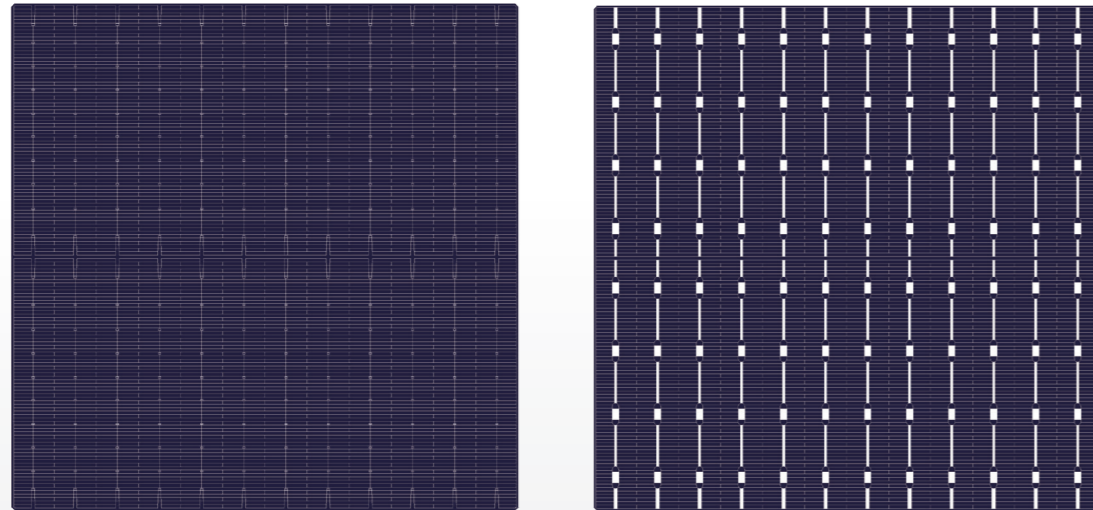
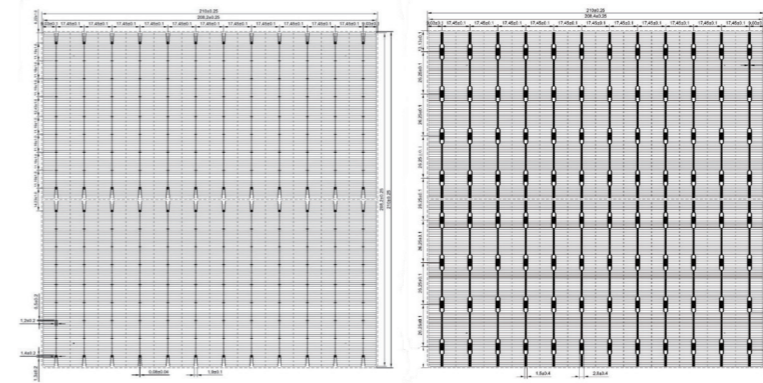


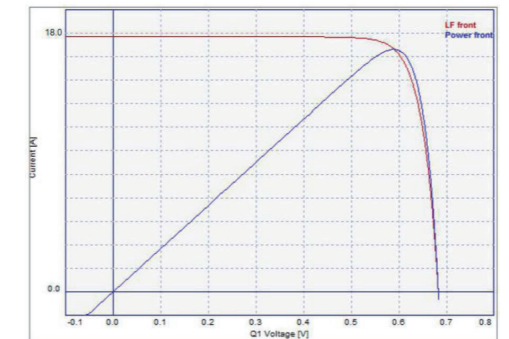
# M210-12BB DATA SHEET



## Printing Graphics



## IV Curve



## Weldability

Minimum peeling intensity  $\geq 1.0\text{N/mm}$   
 Results may vary depending on the welding ribbon, welding methods and conditions.

## Technical Characteristics

Dimension	Thickness	Front	Back(+)
210mm*210mm $\pm 0.25\text{mm}$	180 $\pm$ 18 $\mu\text{m}$	12*0.08 $\pm$ 0.04mm main bus bar (silver), 168 $\pm$ 15 auxiliary bus bar, blue (dark Blue) anti-reflective film (silicon nitride)	Back electrode width (silver) 2.2 $\pm$ 0.4mm, back covered with aluminum bus bar
TkVoltage:-0.36%/K	TkCurrent:+0.07%/K	TkPower:-0.38%/K	Rsh $\geq$ 35 $\Omega$ , Irev2 $\leq$ 0.8A

## Light Intensity and Reliability

Intensity(W/m <sup>2</sup> )	Uoc	Isc
1000	1.000	1.000
900	0.996	0.903
800	0.991	0.803
600	0.988	0.602
400	0.962	0.403

The UOC(ISC) tested by 1000W/m<sup>2</sup> is the standard, and the ISC (ISC) decreases with the strong decrease in light.

## Front Side Electrical Performance

Eff(%)	Pmpp(W)	FF(%)	I <sub>mp</sub> (A)	U <sub>mp</sub> (V)	ISC(A)	Uoc(V)
22.2	9.66	80.94	16.912	0.571	17.888	0.667
22.3	9.70	81.05	6.960	0.572	17.945	0.667
22.4	9.75	81.14	17.037	0.572	17.980	0.668
22.5	9.79	81.16	17.114	0.572	18.057	0.668
22.6	9.83	81.17	17.161	0.573	18.108	0.669
22.7	9.88	81.17	17.328	0.573	18.108	0.672
22.8	9.92	81.18	17.285	0.574	18.160	0.673
22.9	9.97	81.18	17.302	0.576	18.187	0.675
23.0	10.01	81.19	17.348	0.577	18.211	0.677
23.1	10.05	81.30	17.394	0.578	18.240	0.678
23.2	10.10	81.40	17.471	0.578	18.297	0.678
23.3	10.14	81.51	17.517	0.579	18.325	0.679

STC:1000W/m<sup>2</sup>, AM1.5, 25°C