







M21012BBF50

210 Monocrystalline Bifacial PERC Solar Cell

-  Low reflection of uniform fine texturing structure
-  Uniform tower base from backside alkaline polishing
-  High square resistance
-  High density fingers



efficiency of testing production

23.3~23.7%

Electrical Performance

Grade	Unit	23.40	23.30	23.20	23.10	23.00	22.90	22.80	22.70	22.50
Voc	V	0.692	0.691	0.690	0.689	0.688	0.687	0.686	0.685	0.684
Isc	A	18.157	18.131	18.124	18.112	18.095	18.076	18.058	18.033	18.015
Vmpp	V	0.597	0.596	0.595	0.594	0.593	0.592	0.591	0.590	0.589
Imp	A	17.284	17.239	17.194	17.148	17.103	17.057	17.012	16.966	16.845
Pmpp	W	10.32	10.27	10.23	10.19	10.14	10.10	10.05	10.01	9.92

Standard Test Conditions: 1000W/m², AM1.5, 25 °C

Temperature Coefficient

TkPower $-(0.39 \pm 0.02) \%/k$

TkVoltage $-(0.33 \pm 0.03) \%/k$

TkCurrent $+(0.06 \pm 0.015) \%/k$

Physical Characteristics

Substrate material P-type mono-crystalline silicon wafer-PERC

Cell thickness $160\mu\text{m} \pm 16\mu\text{m}$

Dimension $210\text{mm} \times 210\text{mm} \pm 0.5\text{mm}$

Diagonal $295\text{mm} \pm 0.5\text{mm}$

Front (-) 12 bus bars (silver),
Silicon oxide + blue silicon nitride compound anti reflection coating(PID Free)

Back (+) Silicon oxynitride and Aluminum lines back-surface field, Laser design of vertical bus bars

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 $\leq 2\%$

Anti-PID

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

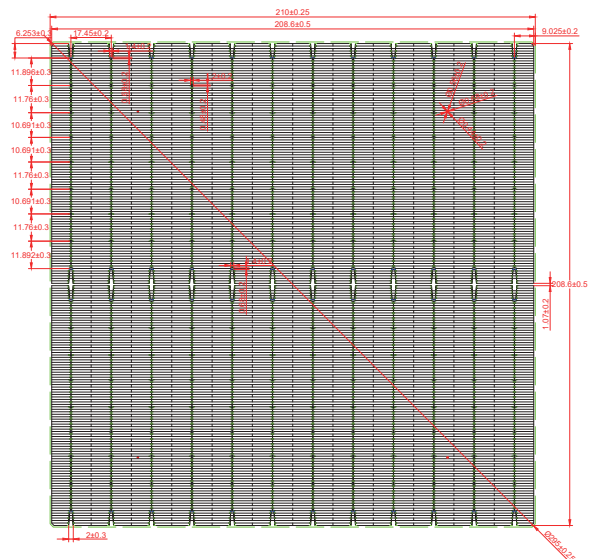
Packaging, Storage

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 humidity below 60%, and temperature $(20 \pm 10) ^\circ\text{C}$. Cells should be sampling inspected again if the storage time over 90 days.

Product Appearance

Front



Back

