







**S18210BB023**

# 182 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	23.60	23.50	23.40	23.30	23.20	23.10	23.00	22.90	22.80
V <sub>oc</sub>	V	0.692	0.691	0.690	0.689	0.688	0.687	0.686	0.685	0.684
I <sub>sc</sub>	A	13.848	13.833	13.818	13.803	13.783	13.775	13.767	13.747	13.735
V <sub>mpp</sub>	V	0.595	0.594	0.593	0.592	0.591	0.590	0.589	0.588	0.587
I <sub>mpp</sub>	A	13.210	13.190	13.169	13.148	13.122	13.105	13.088	13.067	13.042
P <sub>mpp</sub>	W	7.85	7.82	7.79	7.76	7.73	7.69	7.66	7.63	7.59

Standard Test Conditions: 1000W/m<sup>2</sup>, 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  $182\text{mm} \times 182\text{mm} \pm 0.5\text{mm}$

Diagonal  $247\text{mm} \pm 0.5\text{mm}$

Front (-)  $10 \times 0.08\text{mm} \pm 0.03\text{mm}$  bus bars (silver) 168 lines, Silicon oxide + blue silicon nitride compound anti reflection coating (PID Free)

Back (+)  $1.2 \pm 0.3\text{mm}$  wide soldering pads (silver), Aluminum oxide and Aluminum lines back-surface field, Laser design of vertical bus bars

## Light induced degradation test

Using Xenon lamp (Irradiance of 1000W/m<sup>2</sup>, with spectrum AM 1.5) to irradiate test cells, after a total irradiation of 5 kWh/m<sup>2</sup>, the degradation of maximum output power of cells is  $\leq 2\%$

## Anti-PID

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

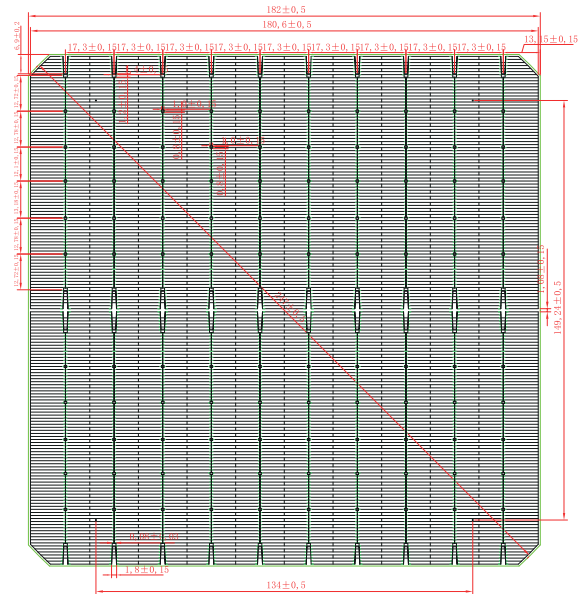
## Packaging, Storage

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  $(20 \pm 10) \text{ }^\circ\text{C}$ . Cells should be sampling inspected again if the storage time over 90 days.

## Product Appearance

### Front



### Back

