



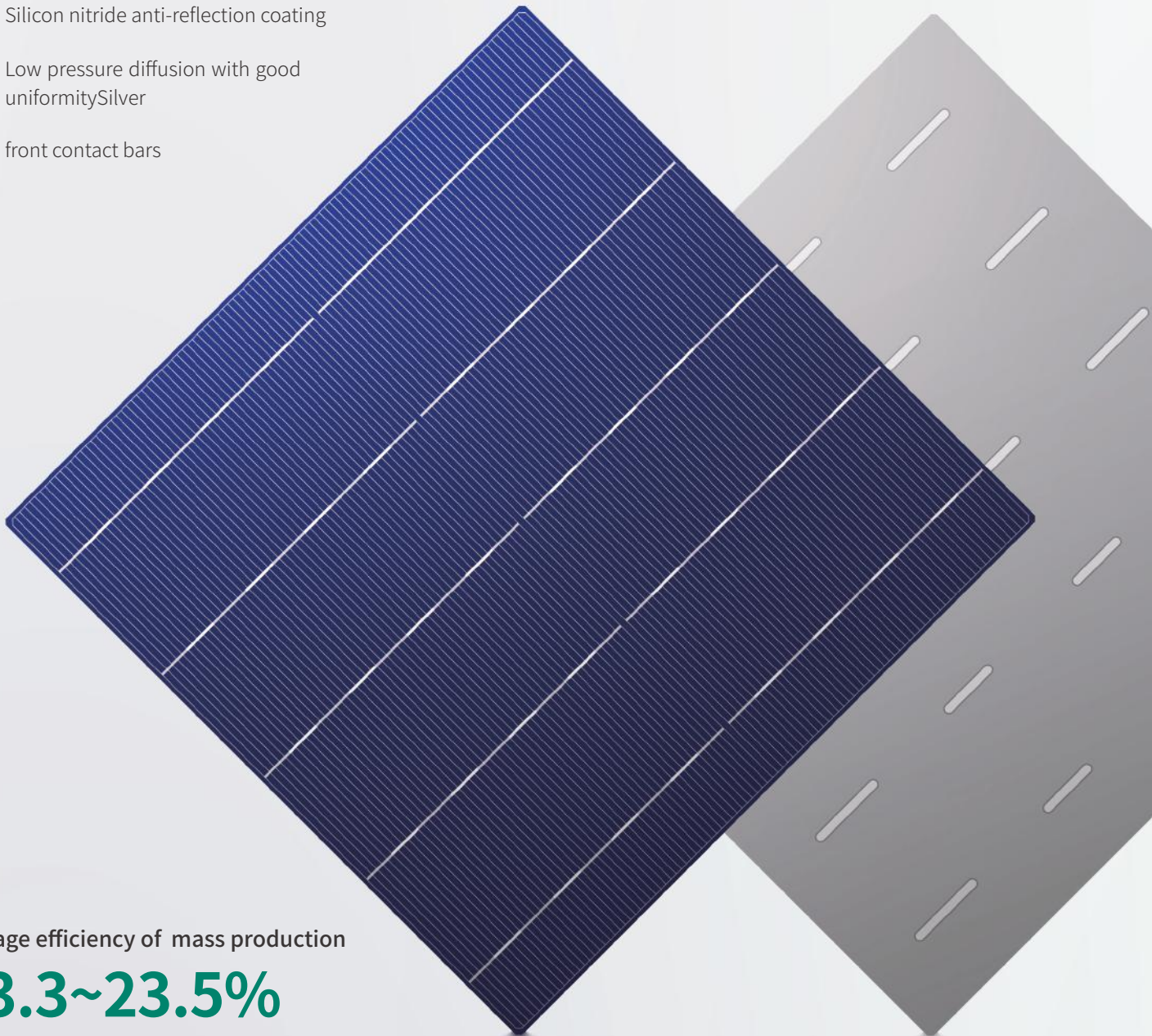




P1575BB104M8

157 Polycrystalline Solar Cell

-  Ultra-Efficient solar cells
-  Silicon nitride anti-reflection coating
-  Low pressure diffusion with good uniformity Silver
-  front contact bars



Average efficiency of mass production

23.3~23.5%

Electrical Performance

Grade	Unit	19.00	18.90	18.80	18.70	18.60	18.50	18.40
Voc	V	0.641	0.640	0.638	0.637	0.636	0.635	0.633
Isc	A	9.060	9.039	9.021	9.001	8.988	8.957	8.933
Vmpp	V	0.545	0.544	0.542	0.541	0.539	0.538	0.537
Impp	A	8.570	8.561	8.541	8.520	8.484	8.466	8.442
Pmpp	W	4.67	4.64	4.62	4.59	4.57	4.55	4.52

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

Temperature Coefficient

TkPower $-(0.4035 \pm 0.02) \%/^{\circ}\text{C}$

TkVoltage $-(0.3283 \pm 0.03) \%/^{\circ}\text{C}$

TkCurrent $+(0.0725 \pm 0.015) \%/^{\circ}\text{C}$

Physical Characteristics

Substrate material P-type polycrystalline silicon wafer

Cell thickness $180\mu\text{m} \pm 20\mu\text{m}$

Dimension $157\text{mm} \times 157\text{mm} \pm 0.5\text{mm}$

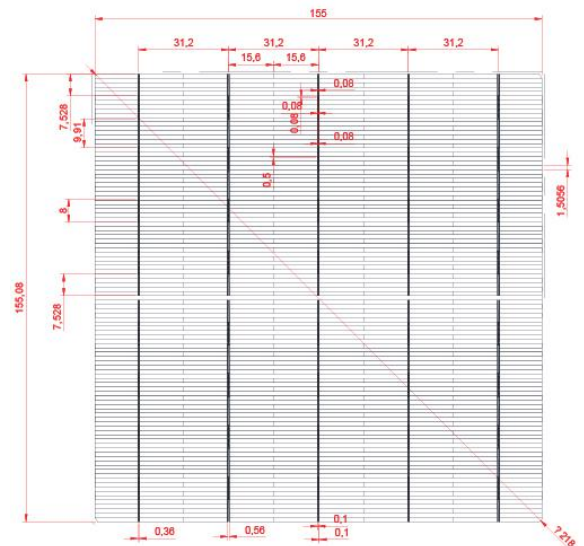
Diagonal $220.7\text{mm} \pm 0.5\text{mm}$

Front (-) $5 \times 0.56\text{mm} \pm 0.1\text{mm}$ bus bars (silver) 104 lines, Silicon oxide + blue silicon nitride compound anti-reflection coating (PID Free)

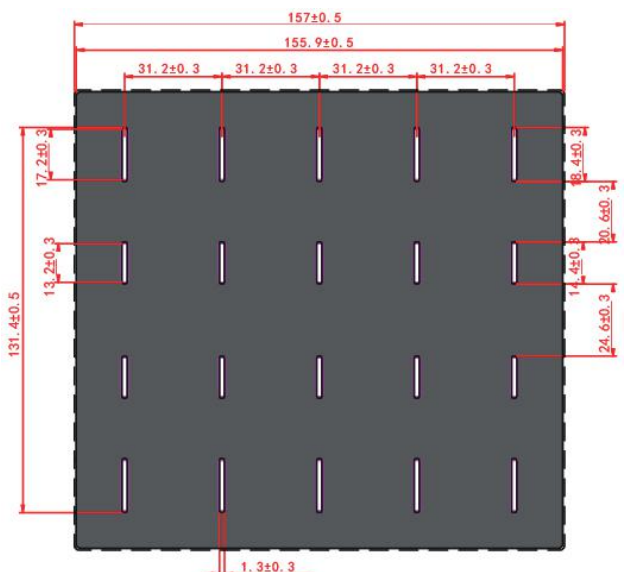
Back (+) $1.3 \pm 0.3\text{mm}$ wide soldering pads (silver), Aluminum back-surface field

Product Appearance

Front



Back



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: $\leq 1\%$

Anti-PID

Potential Induced Degradation (-1500V, 192h): $\leq 3\%$

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 $\leq 40^{\circ}\text{C}$. Cells should be sampling inspected again if the storage time over 45 days.

