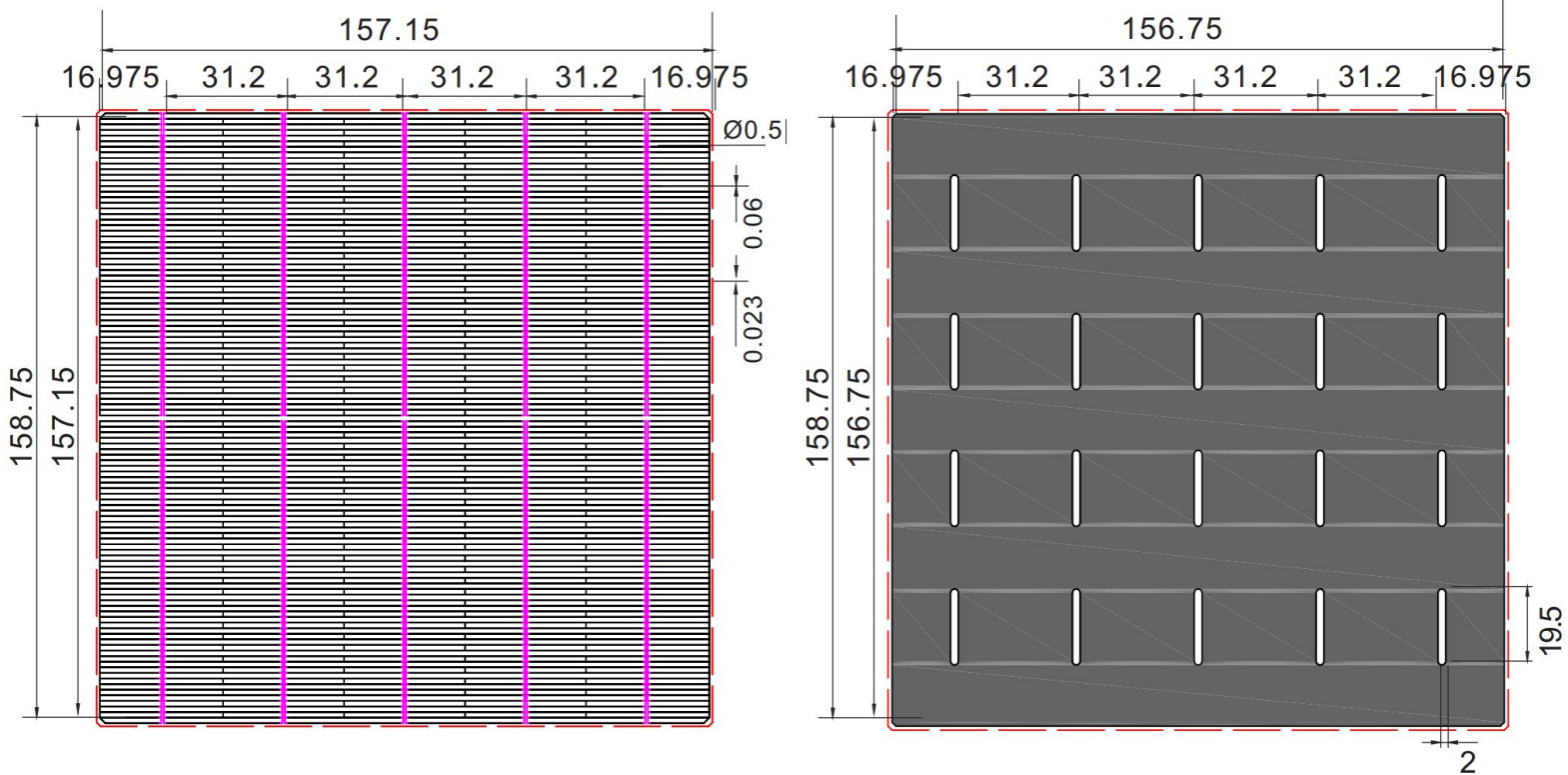


HD SOLAR

P-TYPE PERC

Monocrystalline silicon 158.75 5BB solar cells



MECHANICAL DATA AND DESIGN

Format	158.75mm×158.75mm±0.25mm
Diameter	223±0.25mm(round chamfers)
Thickness	180μm±20μm
Front(-)	0.7±0.1mm wide bus bars, 110 finger grids (Silicon nitride)
Back(+)	2.0mm ±0.1mm wide discontinuous soldering pads Aluminum fingers (Silicon nitride)

TEMPERATURE COEFFICIENTS

Voltage	-0.31%/K
Current	+0.048%/K
Power	-0.38%/K

Product Feature

- High conversion efficiency up to 23.00%
- Light Induced Degradation $\leq 2.5\%$
- High resistance of PID (Potential Induced Degradation)
- Power temperature coefficient $\leq -0.38\%/^{\circ}\text{C}$
- Weak light response ($200\text{w}/\text{m}^2$) $\geq 95\%$
- Lower CTM loss, better for the high efficiency module

Quality Control

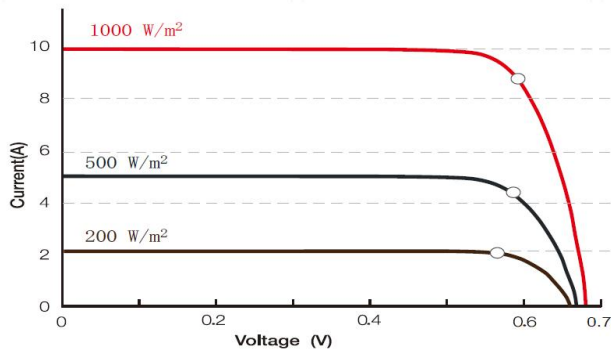
- The accuracy of the efficiency test is controlled at $\pm 0.1\%$
- 100% automatic inspection of IV/EL/Appearance
- Calibration cell source to fraunhofer ISE

Efficiency(%)	Pmpp(W)	Umpp(V)	Ippp(A)	Uoc(V)	Isc(A)	FF(%)
23.00	5.80	0.597	9.708	0.691	10.380	80.82
22.90	5.77	0.595	9.698	0.690	10.360	80.74
22.80	5.75	0.593	9.689	0.689	10.340	80.66
22.70	5.72	0.591	9.679	0.688	10.320	80.58
22.60	5.69	0.589	9.669	0.687	10.300	80.50
22.50	5.67	0.587	9.659	0.686	10.280	80.41
22.40	5.64	0.585	9.649	0.685	10.260	80.33
22.30	5.62	0.583	9.639	0.684	10.240	80.24
22.20	5.59	0.581	9.629	0.683	10.220	80.16
22.10	5.57	0.579	9.618	0.682	10.200	80.07
22.00	5.54	0.577	9.608	0.681	10.018	79.98

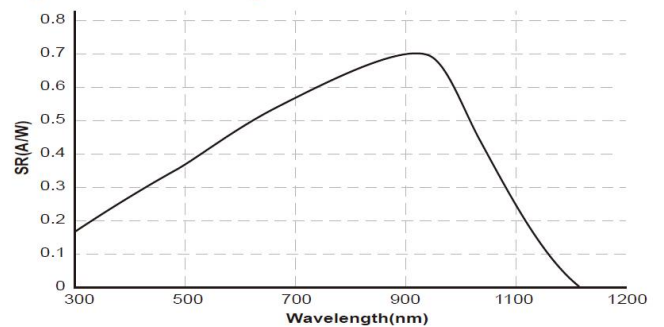
Standard test conditions: $1000\text{w}/\text{m}^2$, AM 1.5, 25°C

Specifications and data are only for reference

IV Curve



Spectral Response (SR)



Specifications subjects to technical changes and tests. HD Solar reserves the right of final interpretation.

Specifications subject to technical changes 11.2019 HD Solar

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