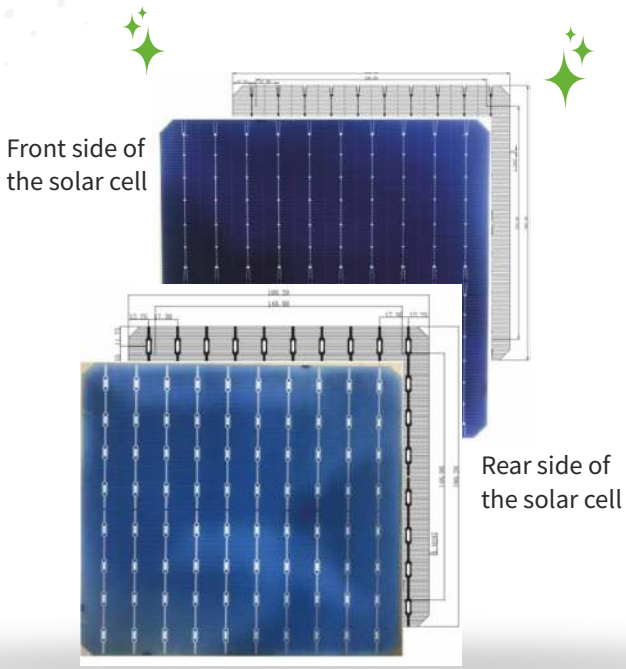
182 MONO PERC SOLAR CELL PIRANHA_PTYPE_M10_BI-FACIAL



ILLUMINATING THE FUTURE, ONE CELL AT A TIME

- Ultra-Efficient solar cell with anisotropically etched surface, Bi-facial light receiving structure & half cut design, helps in improving the generating capacity of the module.
- Front 8 rear electrode pattern design improves the mechanical load of the module. Front 8 rear electrode pattern design improves the mechanical load of the module.
- The narrow design of the rear bus bar reduces the shading rate & improves the double-sided rate of the module.
- Anti PID performance to ensure the stability of the Module power.

MECHANICAL DATA AND DESIGN

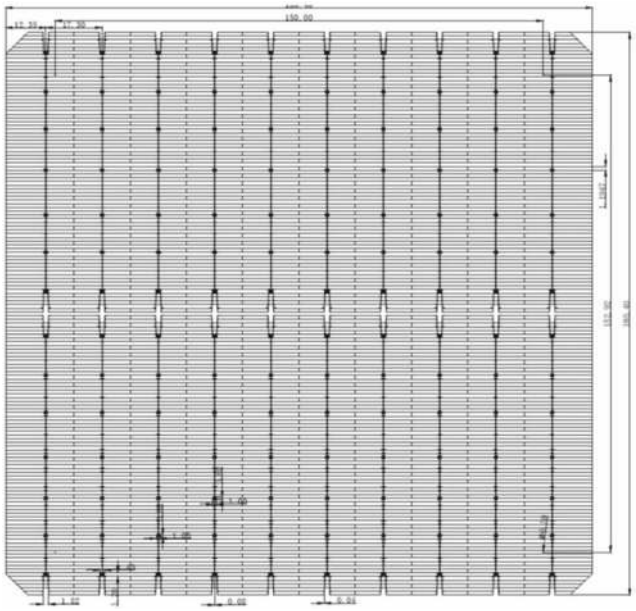
Model	PEPPL_PIRANHA_P TYPE_M10_BI-FACIAL
Product	182_10BB_152F Bifacial Mono PERC Solar Cell
Code	PEPPL_BI_M10_10BB-1
Format	182 mm x 182 mm ± 0.25 mm
Thickness	170 µm ± 17.5
Diagonal	247mm ±0.25 mm

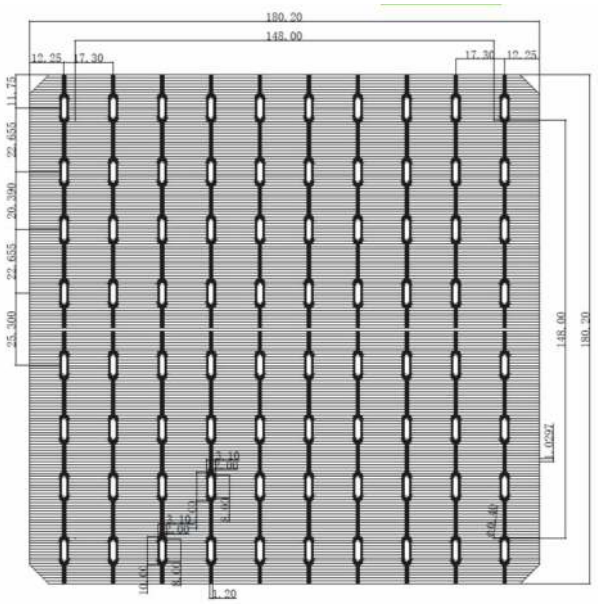
Front side (-)	10*0.08mm ±0.03 mm bus bars (Silver) 152 fingers, Silicon oxide + Silicon nitride compound anti-reflection coating (PID Free)
Back side (+)	Passivated Layer (AlOx, SiON & SiNx) . The rear electrode is composed of 10 busbar, 1.4 ±.0.3 mm wide soldering pads
Center to center Bus bar distance	17.30 ± 0.15 mm.

182 MONO PERC SOLAR CELL
PIRANHA_PTYPE_M10_BI-FACIAL

Premier Energies

PEPPL_M10,10BB-152F-PRINTING PATTERNS

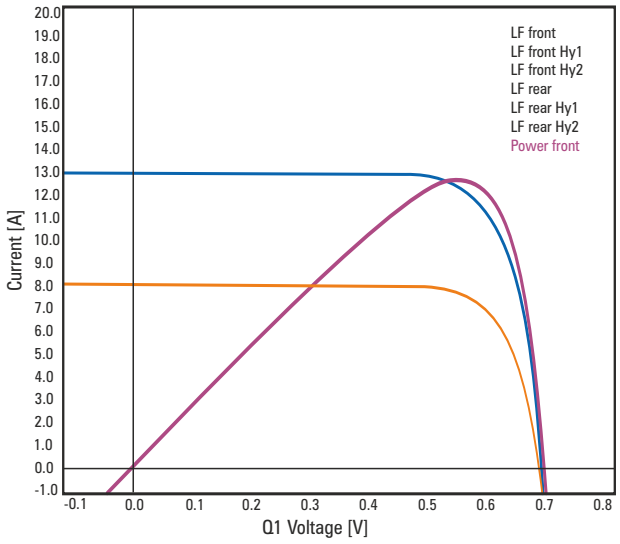




ELECTRICAL CHARACTERISTICS (STC*)

EFF. CLASS %	EFF. RANGE	PMPP(W)	VMPP(V)	IMPP(A)	VOC(V)	ISC(A)	FF(%)
23.3	23.30-23.40	7.69	0.607	12.67	0.691	13.41	83.00
23.2	23.20-23.30	7.66	0.605	12.66	0.689	13.41	82.93
23.1	23.10-23.20	7.63	0.603	12.65	0.688	13.39	82.86
23.0	23.00-23.10	7.59	0.601	12.64	0.686	13.37	82.8
22.9	22.90-23.00	7.56	0.599	12.62	0.685	13.34	82.73
22.8	22.80-22.90	7.53	0.597	12.62	0.684	13.32	82.66
22.7	22.70-22.80	7.49	0.595	12.58	0.683	13.3	82.48
22.6	22.60-22.70	7.46	0.593	12.58	0.682	13.29	82.32
22.5	22.50-22.60	7.43	0.591	12.58	0.681	13.28	82.11
22.4	22.40-22.50	7.40	0.589	12.56	0.68	13.28	81.97
22.3	22.30-22.40	7.36	0.587	12.54	0.678	13.27	81.81
22.2	22.20-22.30	7.33	0.585	12.54	0.677	13.26	81.71
22.1	22.10-22.20	7.30	0.583	12.52	0.675	13.25	81.59
22.00	22.00-22.10	7.26	0.58	12.51	0.674	13.24	81.4
21.9	21.90-22.00	7.23	0.579	12.50	0.673	13.23	81.23
21.8	21.80-21.90	7.20	0.577	12.48	0.672	13.21	81.09
21.7	21.70-21.80	7.16	0.575	12.46	0.671	13.2	80.88
21.6	21.60-21.70	7.13	0.573	12.44	0.669	13.2	80.73
21.5	21.50-21.60	7.10	0.571	12.44	0.668	13.19	80.59
21.4	21.40-21.50	7.07	0.569	12.42	0.667	13.18	80.46
21.3	21.30-21.40	7.03	0.567	12.40	0.665	13.15	80.35
21.2	21.20-21.30	7.00	0.566	12.38	0.664	13.13	80.24
21.1	21.10-21.20	6.97	0.564	12.36	0.663	13.11	80.12
21.0	21.00-21.10	6.93	0.562	12.33	0.662	13.08	80.03

(Q1) Forward voltage with light



Temperature Coefficient
TK Voltage: -0.32mV/K
TK Current: 0.04 mA/K
TK Power: -0.38%/K

*Standard Testing condition
Light Intensity: -1000 ±5 W/m²
Light Spectrum: AM1.5
Temperature: 25± 2° C

COLOR CLASSIFICATION
3Color shades, Light Blue, Medium Blue & Dark Blue

LIGHT INTENSITY DEPENDENCE
Ratio of Vmpp (Impp) at reduced intensity to Impp (Vmpp) at 1000 W/m²

INTENSITY(W/M²)	VMPP	IMPP
1000	1.00	1.00
800	0.99	0.80
600	0.98	0.60
200	0.92	0.20

PROCESS RECOMMENDATION	
Solder joint	Copper ribbons coated with 60%Sn and 40%Pb
Solderability	Peel strength Min> 1.0N/mm

For more details, please contact:
PREMIER ENERGIES PHOTOVOLTAIC PVT. LTD.
sales@premierenergies.com | premierenergies.com