

VIETNAM SUNERGY CELL

VTS-N-P-M10B10F148

TOPCon Solar Cell

Cell Appearance

Dimension: 182mmx182mm±0.5mm

Cell Thickness: 140μm±20μm

Front side: 1.2mm wide bus bars, Passivated Emitter(AlOx &

Silicon nitride anti-reflection coating)

Back side: 1.2mm wide bus bars, Tunnel Oxide, Silicon nitride

anti-reflection coating

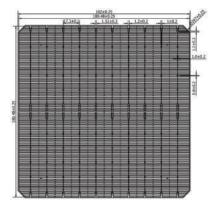
Product Features

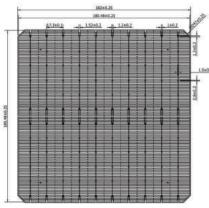
- Strict incoming and outgoing inspection
- · Higher efficiency and bifaciality
- Lower temperature coefficient and degradation
- Lower hot spot effect and power loss during encapsulation
- LETID/LID free impurities, and better anti-PID performance

Quality control

- · Strict incoming and outgoing inspection
- Fully intelligent quality control, real-time monitoring of all equipment and processes
- 100% of the cells have passed the automated appearance inspection and electrical test

Cell Layout





Temperature Coefficients

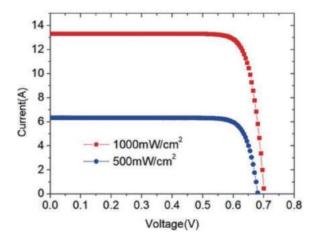
TkVoltage: -0.30%/K	TkPower: -0.36%/K
TkCurrent: -0.04%/K	Rsh≥50Ω, Irev2≤1.0A

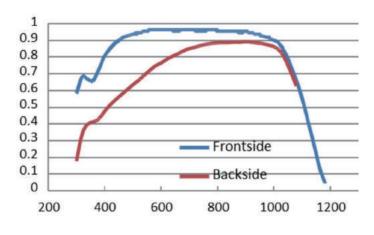
Electrical Characteristics

Eff(%)	Pmpp (W)	Umpp (V)	Impp (A)	Uoc (V)	Isc (A)	FF (%)
24.9	8.22	0.612	13.438	0.713	13.990	83.14
24.8	8.19	0.611	13.405	0.712	13.965	83.08
24.7	8.16	0.610	13.370	0.711	13.930	83.01
24.6	8.12	0.609	13.335	0.710	13.895	82.94
24.5	8.09	0.608	13.300	0.709	13.860	82.88
24.4	8.06	0.607	13.265	0.708	13.825	82.80
24.3	8.02	0.607	13.230	0.708	13.790	82.72
24.2	7.99	0.606	13.195	0.707	13.755	82.64
24.1	7.96	0.605	13.155	0.706	13.715	82.59
24.0	7.92	0.604	13.115	0.705	13.675	82.51
23.9	7.89	0.603	13.080	0.704	13.640	82.43
23.8	7.86	0.602	13.055	0.703	13.615	82.33

Under standard test condition: 1000W/ m2, AM 1.5, 25°C **Illustration:** 24.10% \rightarrow Actual range: 24.10%~24.20%

Electrical curves





Specification and data are for reference only and may change without prior notice

All information in the document belongs to TOYO Solar, any disclosure is forbidden without written permission



Vietnam Sunergy Cell Company Limited

Address: Cam Khe Industrial Park, Cam Khe Town, Cam Khe District, Phu Tho Province, Vietnam Tel: 0210-3889111

Email: cell-quanly@toyo-solar.com

Fax: 0210-3889222