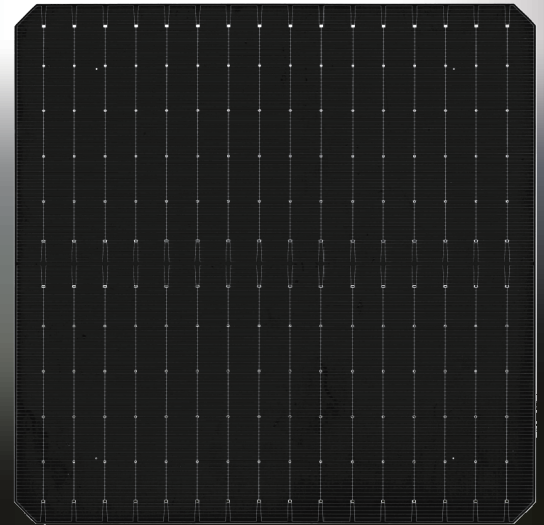


NSEZC Ultra-Efficient

TOPCon Series

Mono Crystalline Solar Cell (Bi-Facial - TOPCon)



Features

- Ultra-Efficient solar cells with an anisotropically etched surface
- Silicon nitride anti-reflection coating
- N-type cells with tunnel oxide passivated contact technology

Performance and Quality

- Proper handling from incoming inspection through production, outgoing inspection and packaging
- 100% checked for reverse current and visual appearance
- Calibrated against Fraunhofer ISE
- RoHS compliance
- **100% PID Resistance**

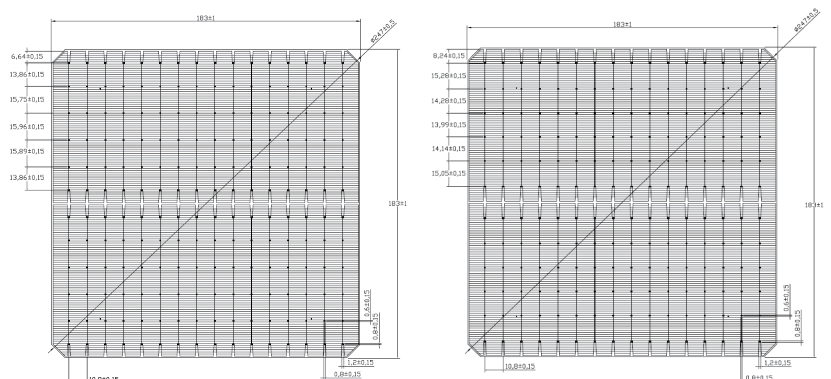
Packaging

- Minimize the risk of broken cells with special design
- Label with product information

Physical Characteristics

Dimension	183 mm x 183 mm ± 1 mm
Cell's Thickness (si)	130 μm ± 30 μm
Front Side (+)	Silicon nitride anti-reflection coating 1.2 mm / 0.8 mm ± 0.15 mm silver pads
Back Side (-)	Silicon nitride anti-reflection coating 1.2 mm / 0.8 mm ± 0.15 mm silver pads

Cell Layout



Mono Crystalline Solar Cell (Bi-Facial - TOPCon)

NSEZC Ultra-Efficient



Electrical Characteristics

Class	Efficiency Range (%)	Rated Power (Wp)	*Maximum Power Current (A)	*Short Circuit Current (A)	*Maximum Power Voltage (V)	*Open Circuit Voltage (V)
242	24.2-24.3	7.989	12.912	13.653	0.622	0.714
243	24.3-24.4	8.022	12.921	13.659	0.623	0.715
244	24.4-24.5	8.055	12.942	13.662	0.625	0.715
245	24.5-24.6	8.088	12.958	13.662	0.626	0.716
246	24.6-24.7	8.121	12.963	13.663	0.628	0.716
247	24.7-24.8	8.154	12.972	13.664	0.630	0.716
248	24.8-24.9	8.187	12.983	13.666	0.632	0.717
249	24.9-25.0	8.220	12.993	13.666	0.634	0.717
250	25.0-25.1	8.254	13.005	13.668	0.638	0.718
251	25.1-25.2	8.287	13.017	13.670	0.638	0.719
252	25.2-25.3	8.320	13.028	13.673	0.640	0.720

Test condition : 1000 W / m², AM 1.5, 25°C Power measuring tolerance: ± 1.5% rel.

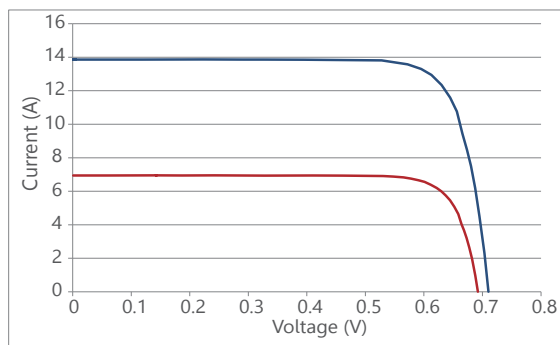
Temperature coefficients

Current (%/K)	0.045
Voltage (%/K)	-0.25
Power (%/K)	-0.32

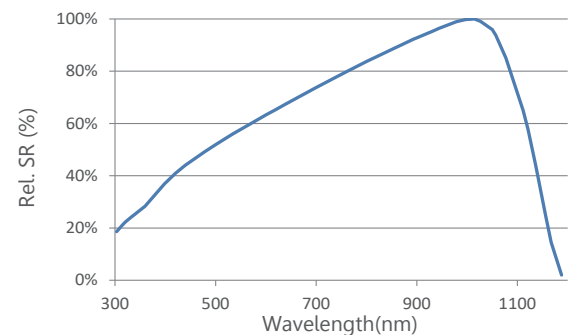
Light Intensity Dependence

Intensity [W/m ²]	V _{mpp}	I _{mpp}
1000	1.000	1.000
900	0.998	0.900
500	0.979	0.499
300	0.960	0.299
200	0.941	0.199

IV-Curve



Spectral Response



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