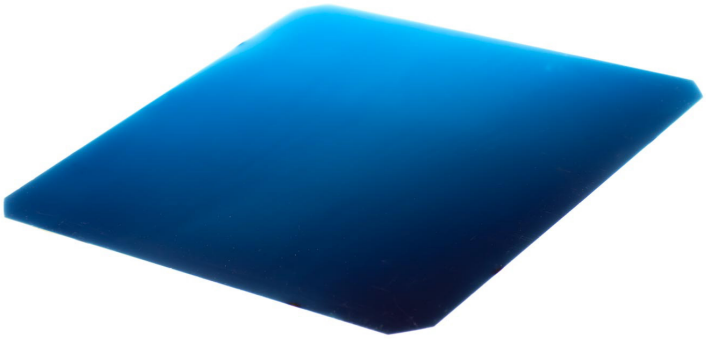
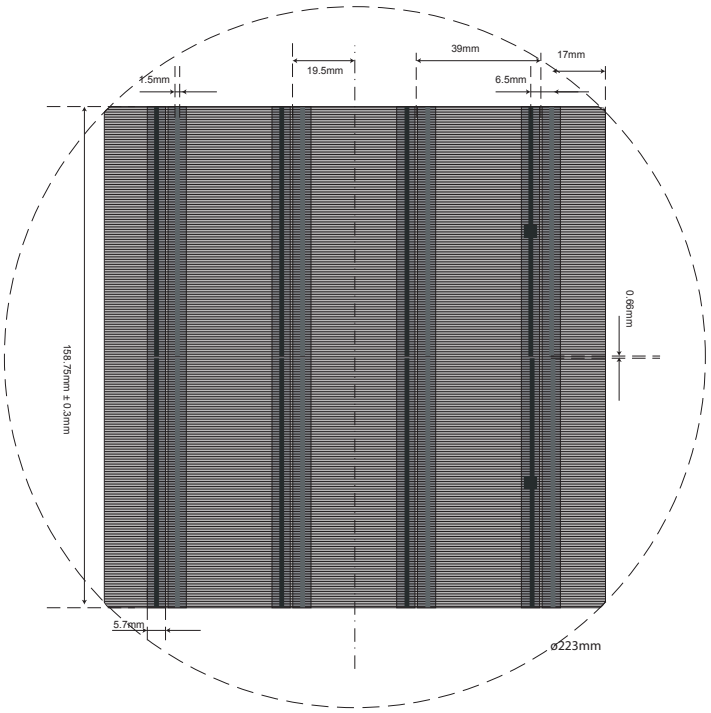
Chrystal IBC Cell

N-type mono Bifacial Interdigitated Back Contact solar cell

VALOE





MECHANICAL DATA

Area	25199 mm²
Format	G1; 158.75 x 158.75mm, 223mm diameter ± 0.3mm
Thickness	160µm ± 20µm
Layout	4 bus bar

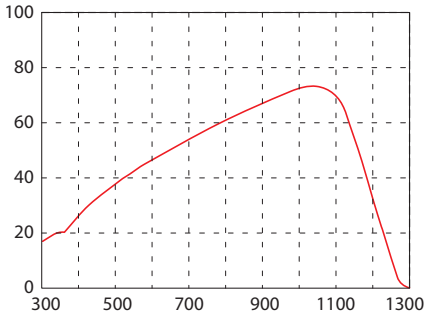
Electrical cell classification (sorting under AM 1.5G illumination at 25°C)

Cell class / Efficiency (%)	22.8	23.0	23.2	23.4	23.6
Power (Wp)	5.75	5.80	5.85	5.90	5.95
Isc (A)	10.33	10.36	10.40	10.44	10.47
Voc (mV)	692	694	696	698	701
FF (%)	80	80	81	81	81
Immp (A)	9.92	9.94	9.97	10.03	10.08
Ummp (mV)	579	583	586	588	590

Temperature coefficients

Isc	0.037% /K
Uoc	-0.24% /K
Efficiency	-0.29% /K

Typical Quantum efficiency



Bi-Faciality

Bifaciality 75%

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KEY FEATURES

Made in European Union	All cells are manufactured in Lithuania
Bi-facial	Valoe Chrystal IBC cells are bifacial. Bifacial systems can yield up to 25% more electrisity compated with standard system
PID Free	N-Type cell does not suffer from Potential Induced Degradation in the same way as standard p- type cell do
LID / LaTiD free	N-Type cells are also immune to light and elevated temperature induced degradation that can cause severe yield loss with p-type high efficiency cells.
Hot Spot Free cell design	Valoe Chrystal IBC cells have low breaakdown voltage that is spread in large area. Thus Hot spots can not form on these cells
3rd party verification of cell efficiency	Cell efficiency is confirmed using verified by outside institute such as Fraunhofer CalLab and measuring equipment is regularly calibrated using reference cells.
Traceable quality	Cell manufacturing is tracked and recorded into MES system and data is stored to ensure consistant quality
100% Inspection	All cells are inspected and sorted using automated visual, IV measurement and Electro Luminance inspection system. The cells are sorted into different categories by power, current and color qualification
Positive Sorting	The cells are sorted into power bins in a way that all cells exceed the nominal efficiency of the bin.