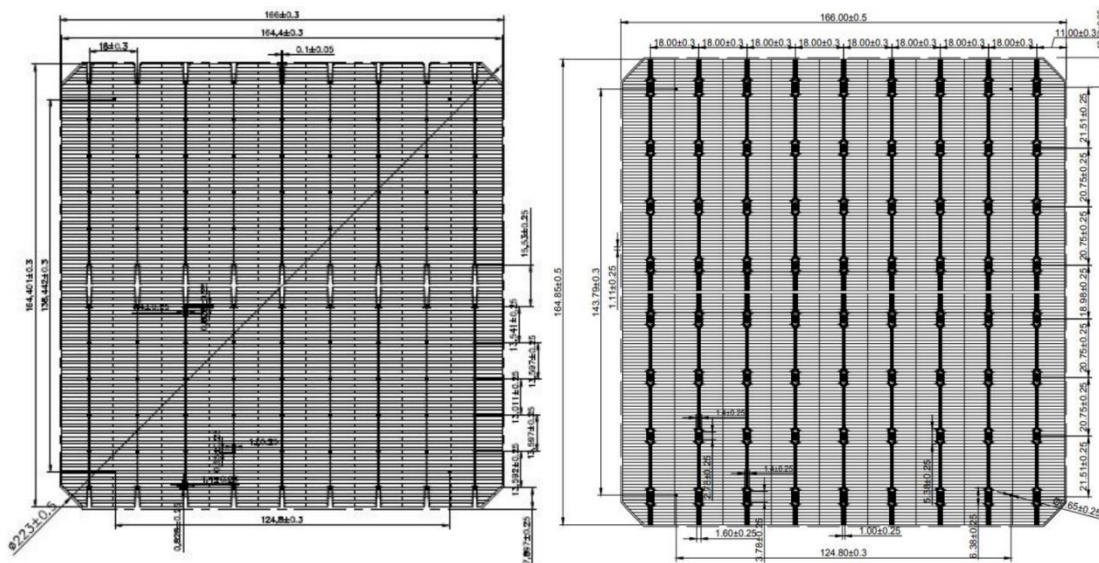


# 苏州斐尔西科技有限公司

## Suzhou Fly Solar Technology Co., Ltd Data sheet for 166mm mono cells

M1669BPERCBP

### Product appearance design



### Technical data and design

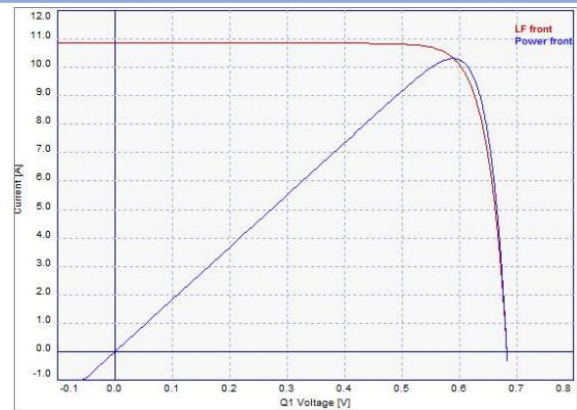
Size	166mm*166mm±0.3mm	TkVoltage: -0.36 %/K
Thickness	190±30um	TkCurrent: +0.07%/K
Front	9*0.1±0.05mm busbars (silver), 134fingers, anti-broken grid design, blue anti-reflection film (silicon nitride)	TkPower: -0.38%/K
back	The width of the back electrode (silver) is 1.4±0.5mm, and the back is covered with aluminum grid lines, with 150 aluminum grid lines on the back, which is designed to prevent grid breakage.	Rsh≥35Ω , Irev2≤0.8A

## Light intensity dependence

Intensity(W/m <sup>2</sup> )	Uoc	Isc
1000	1.000	1.000
900	0.996	0.903
800	0.991	0.803
600	0.988	0.602
400	0.962	0.403

Based on the Voc(Isc) measured at 1000W/m<sup>2</sup>, the range of Voc(Isc) decreasing with light intensity was tested.

## IV curve



## Solder ability

Peel strength minimum  $\geq 1.4\text{N/mm}$

The results may vary according to covered electrode, welding method and conditions.

## Front electrical performance parameters

Efficiency(%)	Maximum output power	Maximum output voltage	Maximum output current	open-circuit voltage	Short circuit current	Filling factor FF (%)
	Pmpp (W)	Umpp (V)	Impp (A)	Uoc (V)	Isc (A)	
23.2	6.36	0.5915	10.752	0.6917	11.261	81.65
23.1	6.33	0.5901	10.727	0.6905	11.246	81.51
23.0	6.31	0.5886	10.714	0.6893	11.230	81.48
22.9	6.28	0.5871	10.690	0.6881	11.216	81.36
22.8	6.25	0.5856	10.674	0.6869	11.201	81.24
22.7	6.22	0.5843	10.650	0.6856	11.187	81.14
22.6	6.20	0.5826	10.635	0.6847	11.172	81.00
22.5	6.17	0.5811	10.615	0.6835	11.158	80.88
22.4	6.14	0.5795	10.598	0.6823	11.142	80.78

22.3	6.11	0.5779	10.579	0.6811	11.128	80.66
22.2	6.09	0.5764	10.559	0.6793	11.121	80.57
22.1	6.06	0.5749	10.540	0.6789	11.103	80.38
22	6.03	0.5731	10.525	0.6776	11.090	80.26
21.9	6.00	0.5716	10.503	0.6765	11.073	80.15
21.8	5.98	0.5700	10.485	0.6753	11.057	80.04
21.7	5.95	0.5684	10.467	0.6742	11.042	79.91
21.6	5.92	0.5669	10.446	0.6729	11.028	79.80
21.5	5.89	0.5654	10.426	0.6717	11.011	79.70

Standard test conditions: 1000W/m<sup>2</sup>, AM1.5, 25°C

The above technical parameters are limited by technical changes and tests, and FLY Solar reserves the right of final interpretation.

## Back surface electrical performance parameters

Efficiency (%)	Maximum output power P <sub>mpp</sub> (W)	Maximum output voltage U <sub>mpp</sub> (V)	Maximum output current I <sub>mpp</sub> (A)	open-circuit voltage U <sub>oc</sub> (V)	Short circuit current I <sub>sc</sub> (A)
>16%	4.44	0.5884	7.549	0.6788	8.019
15.5%-16%	4.30	0.5782	7.492	0.6688	7.940
15%-15.5%	4.17	0.5721	7.335	0.6650	7.735
<15%	4.06	0.5657	7.173	0.6592	7.554

Standard test conditions: 1000W/m<sup>2</sup>, AM1.5, 25°C

The above technical parameters are limited by technical changes and tests, and FLY Solar reserves the right of final interpretation.