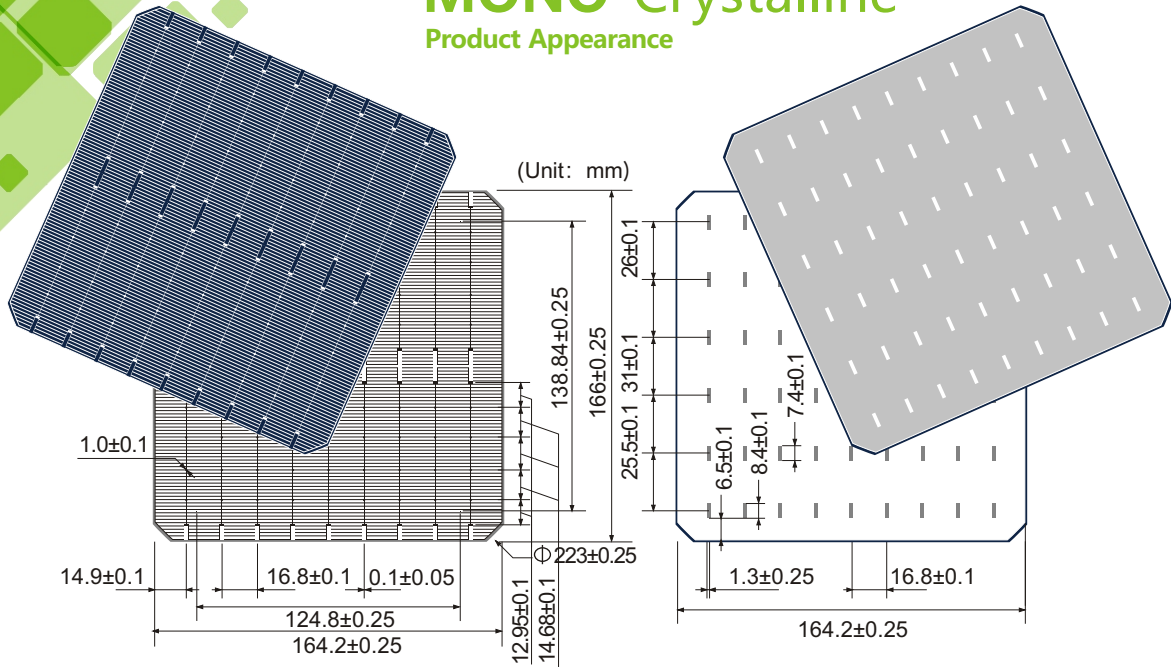


PERC SE Solar Cell

LHHC166M-9BB

MONO-Crystalline

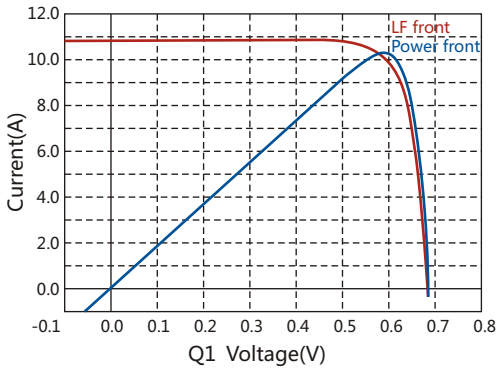
Product Appearance



Technical Data and Design

Dimension	166mm × 166mm ± 0.25mm
Thickness	190 ± 30 μm
Front	9 busbars(silver), width 0.1 ± 0.03mm, 124 finger grids, Blue anti-reflecting coating(silicon nitride)
Back(+)	width of back electrode(silver) 1.3 ± 0.25mm, Back surface field (aluminum), dotted laser design

IV Curve



Solder Ability

Peel strength Minimum ≥ 1.4N/mm

Results may be different due to different ribbons, soldering methods and parameters.

Electrical Performance Parameters

	Efficiency (%)	Pmpp (W)	Vmpp (V)	Imp (A)	Voc (V)	Isc (A)	FF (%)	
TkVoltage : -0.36 %/K	22.9	6.28	0.5943	10.563	0.6817	11.139	82.67	
TkCurrent : +0.07%/K	22.8	6.25	0.5925	10.550	0.6803	11.124	82.60	
TkPower : -0.38%/K	22.7	6.22	0.5902	10.544	0.6784	11.119	82.51	
Rsh ≥ 35Ω , Irev2 ≤ 0.8A	22.6	6.20	0.5885	10.529	0.6770	11.103	82.43	
	22.5	6.17	0.5866	10.515	0.6761	11.089	82.27	
Light Intensity Dependence	22.4	6.14	0.5848	10.502	0.6746	11.077	82.18	
	22.3	6.11	0.5829	10.488	0.6732	11.060	82.11	
	Intensity(W/m2)	Voc	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					
	Take the Voc (Isc) at 1000W/m ² as the standard, test the range of Voc (Isc) decrease with light intensity.	21.7	5.95	0.5714	10.411	0.6610	10.964	82.08
		21.6	5.92	0.5709	10.373	0.6609	10.944	81.87
	21.5	5.89	0.5678	10.382	0.6601	10.940	81.62	

STC (Standard Testing Conditions) : 1000W/m² , AM1.5 , 25°C

Technical parameters above-mentioned subjects to technical changes and tests.

LH Energy reserves the right of final interpretation.



LIGHT & HOPE

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BANGSAOTHONG DISTRICT SAMUT PRAKARN THAILAND 10570

TAX ID: 0115562029595 **TEL:** +66 02 0001217 **Email:** sales@lh-solar.com

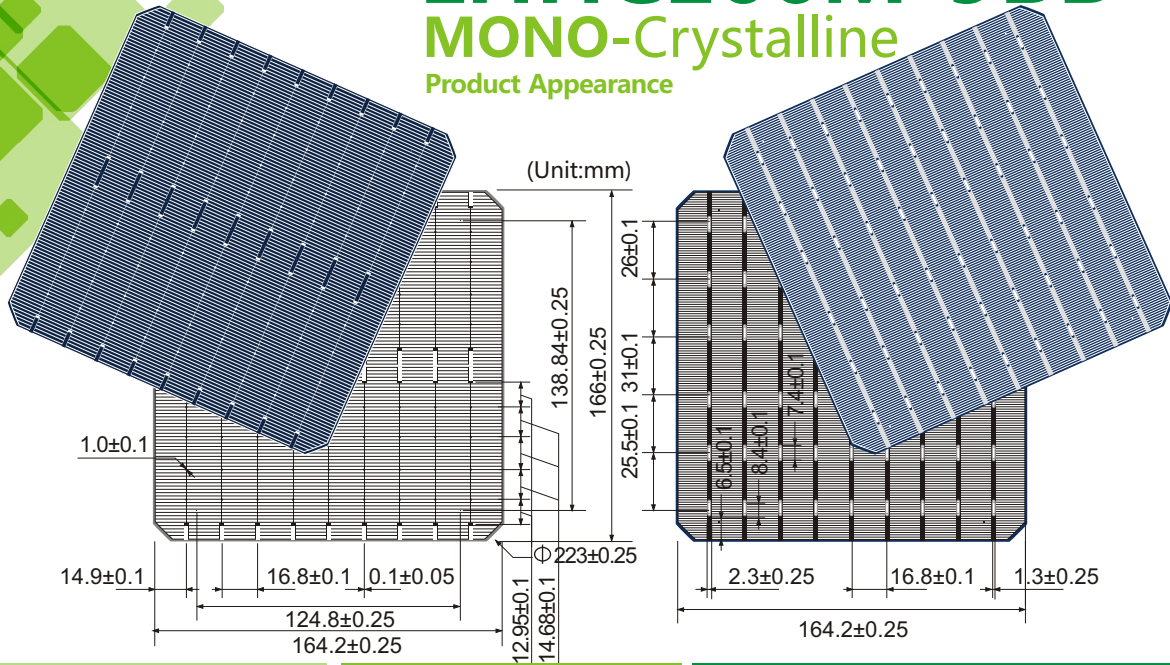
Website: www.lighthopeenergy.com

PERCBP SE Solar Cell

LHHC166M-9BB

MONO-Crystalline

Product Appearance



Technical Data and Design

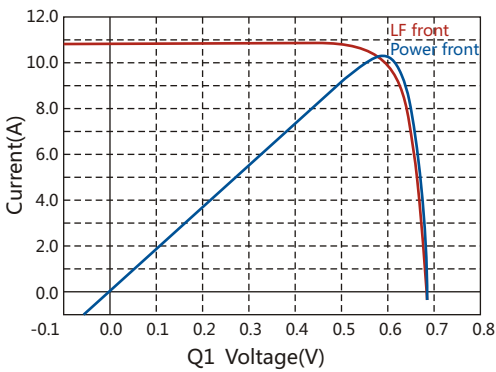
Dimension	166mm × 166mm±0.25mm
Thickness	190±30μm
Front	9 busbars(silver), width 0.1±0.03mm, 124 finger grids, Blue anti-reflecting coating(silicon nitride)
Back(+)	width of back electrode(silver) 1.3±0.25mm, finger grids(aluminum), dotted laser design

TkVoltage	: -0.36 %/K
TkCurrent	: +0.07%/K
TkPower	: -0.38%/K
Rsh	≥35Ω, Irev2≤0.8A

Electrical Performance Parameters

Efficiency (%)	Pmpp (W)	Vmpp (V)	Imp (A)	Voc (V)	Isc (A)	FF (%)
22.9	6.28	0.5933	10.582	0.6874	11.113	82.18
22.8	6.25	0.5916	10.566	0.6859	11.100	82.10
22.7	6.22	0.5905	10.540	0.6837	11.105	81.97
22.6	6.20	0.5887	10.525	0.6822	11.090	81.89
22.5	6.17	0.5873	10.503	0.6811	11.082	81.73
22.4	6.14	0.5856	10.486	0.6807	11.075	81.46
22.3	6.11	0.5835	10.477	0.6790	11.060	81.41
22.2	6.09	0.5817	10.462	0.6780	11.046	81.26
22.1	6.06	0.5799	10.448	0.6777	11.039	80.98
22.0	6.03	0.5781	10.433	0.6774	11.021	80.81
21.9	6.00	0.5760	10.424	0.6748	11.014	80.79
21.8	5.98	0.5742	10.409	0.6743	10.996	80.60
21.7	5.95	0.5720	10.401	0.6729	10.990	80.45
21.6	5.92	0.5701	10.386	0.6719	10.974	80.30
21.5	5.89	0.5684	10.371	0.6713	10.958	80.12

IV Curve



Light Intensity Dependence

Intensity(W/m2)	Voc	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

Take the Voc (Isc) at 1000W/m² as the standard, test the range of Voc (Isc) decrease with light intensity.

Back Electrical Performance Parameters

Efficiency (%)	Pmpp (W)	Vmpp (V)	Imp (A)	Voc (V)	Isc (A)	FF (%)
>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	\

Solder Ability

Peel strength Minimum ≥1.4N/mm

Results may be different due to different ribbons,soldering methods and parameters.

STC (Standard Testing Conditions) : 1000W/m², AM1.5, 25°C
 Technical parameters above-mentioned subjects to technical changes and tests. LH Energy reserves the right of final interpretation.



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