

M-156-3 | 6" Multicrystalline Solar Cell

Features

- High-efficiency solar cells with an isotropically etched surface
- Silicon nitride anti-reflection coating
- Silver front contact bars and full surface aluminum back contact field

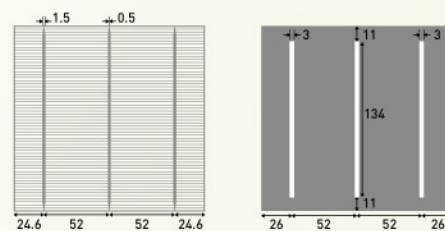
Performance and Quality

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

Packaging

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

Cell Layout



Physical Characteristics

Dimension	156 mm x 156 mm ± 0.5 mm
Thickness	180 μm - 20 / + 30 μm 210 μm ± 30 μm
Front Side (-)	Silicon nitride anti-reflection coating 1.5 mm silver busbar
Back Side (+)	Full surface aluminum back surface field 3.0 mm (silver) continuous soldering pads

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Electrical Characteristics

Class	Efficiency Range (%)	Rated Power (Wp)	*Maximum Power Current (A)	*Short Circuit Current (A)	*Maximum Power Voltage (V)	*Open Circuit Voltage (V)
151	15.0~15.2	3.675	7.383	7.965	0.501	0.603
153	15.2~15.4	3.723	7.461	7.980	0.502	0.604
155	15.4~15.6	3.772	7.518	8.018	0.503	0.605
156	15.6~15.7	3.796	7.547	8.032	0.505	0.606
157	15.7~15.8	3.821	7.573	8.056	0.506	0.607
158	15.8~15.9	3.845	7.602	8.084	0.508	0.608
159	15.9~16.0	3.869	7.632	8.111	0.509	0.609
160	16.0~16.1	3.894	7.661	8.138	0.510	0.611
161	16.1~16.2	3.918	7.688	8.165	0.511	0.612
162	16.2~16.3	3.942	7.714	8.191	0.513	0.613
163	16.3~16.4	3.967	7.742	8.219	0.514	0.615
164	16.4~16.5	3.991	7.767	8.245	0.515	0.616
165	16.5~16.6	4.015	7.792	8.270	0.517	0.618
166	16.6~16.7	4.040	7.815	8.293	0.518	0.619
167	16.7~16.8	4.064	7.839	8.315	0.520	0.620
168	16.8~16.9	4.088	7.867	8.339	0.521	0.622
169	16.9~17.0	4.113	7.899	8.366	0.522	0.623
170	17.0~17.1	4.137	7.927	8.397	0.523	0.624
171	17.1~17.2	4.161	7.966	8.433	0.523	0.625
172	17.2~17.3	4.186	8.005	8.466	0.524	0.625

Test condition: 1000 W / m², AM 1.5, 25 °C Power measuring tolerance: ± 1.5 % rel. *Data & drawing for reference only.

Temperature coefficients

Current (mA/K)	4.36
Voltage (mV/K)	-2.06
Power (%/K)	-0.408

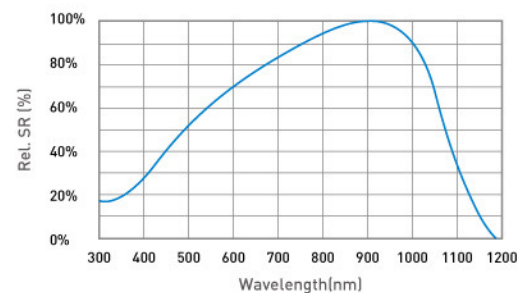
Solderability

Ribbon	Sn - Pb - Ag	62 % - 36 % - 2 %
Flux	Kester	955
Soldering Temp.	Preheating Temp.	180 ~ 230°C
	Heating Temp.	180 ~ 230°C
Condition	Heating duration	3 Sec
	Applied pressure	170 ~ 200 g

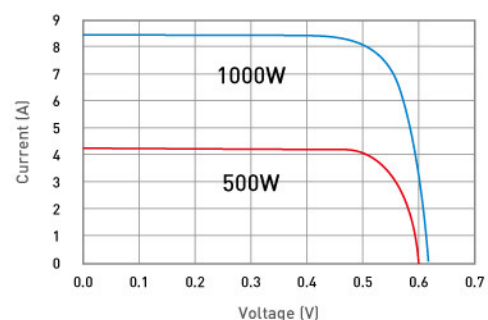
Light Intensity Dependence

Intensity [W/m ²]	V _{mpp}	I _{mpp}
1000	1.000	1.000
800	0.998	0.799
600	0.991	0.599
400	0.981	0.397
200	0.952	0.196

Spectral Response



IV-Curve



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