

# M-156-2-Fortis | 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

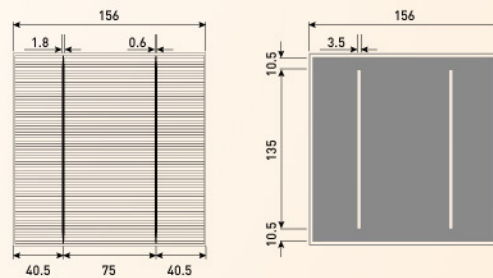
### Performance and Quality

- 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

<b>Dimension</b>	156 mm x 156 mm ± 0.5 mm
<b>Thickness</b>	180 μm - 20 / + 30 μm 210 μm ± 30 μm
<b>Front Side (-)</b>	Silicon nitride anti-reflection coating 1.8 mm silver busbar
<b>Back Side (+)</b>	Full surface aluminum back surface field 3.5 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)
170	17.0~17.1	4.137	8.025	8.507	0.520	0.625
171	17.1~17.2	4.161	8.042	8.528	0.521	0.626
172	17.2~17.3	4.186	8.055	8.545	0.522	0.627
173	17.3~17.4	4.210	8.070	8.570	0.524	0.628
174	17.4~17.5	4.234	8.087	8.598	0.525	0.629
175	17.5~17.6	4.259	8.098	8.623	0.528	0.631
176	17.6~17.7	4.283	8.110	8.628	0.530	0.632
177	17.7~17.8	4.307	8.135	8.645	0.531	0.633
178	17.8~17.9	4.332	8.161	8.667	0.532	0.634

Test condition: 1000 W / m<sup>2</sup>, AM 1.5, 25 °C    Power measuring tolerance: ± 1.5 % rel.    \*Data & drawing for reference only.

## Temperature coefficients

Current (mA/K)	4.71
Voltage (mV/K)	-2.02
Power (%/K)	-0.41

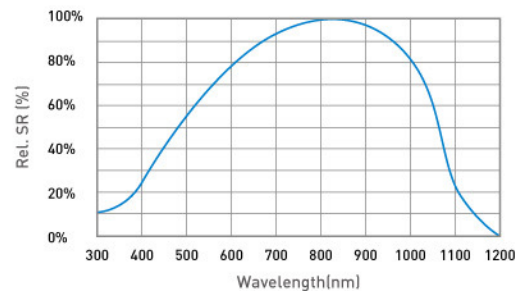
## Solderability

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

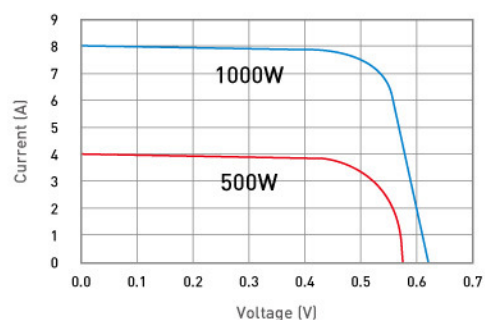
## Light Intensity Dependence

Intensity [W/m <sup>2</sup> ]	V <sub>mpp</sub>	I <sub>mpp</sub>
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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