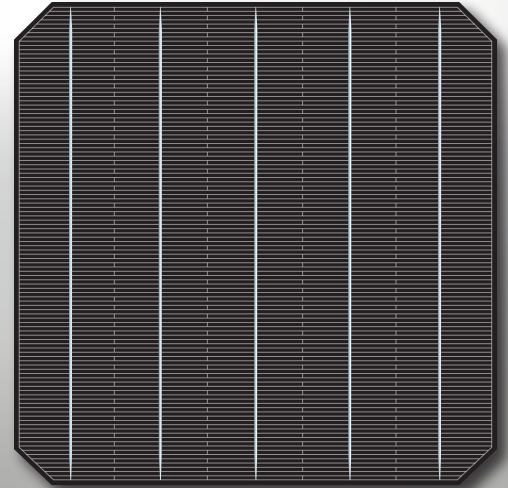


Standard Cell

S-156-5 ver.C

Monocrystalline Solar Cell



Features

- High-efficiency solar cells with an anisotropically 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
- RoHS compliance

• 100% PID Resistance

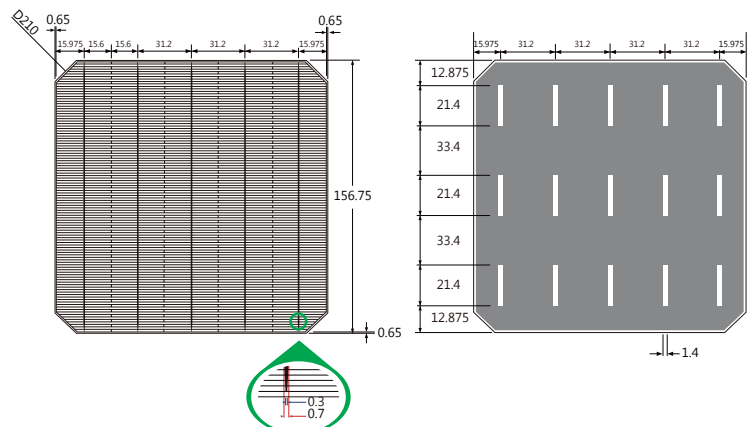
Packaging

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

Physical Characteristics

| | |
|----------------|--|
| Dimension | 156.75 mm x 156.75 mm \pm 0.25 mm |
| Diagonal | 210 mm \pm 0.5 mm |
| Thickness (si) | 180 μ m - 20 / + 30 μ m 200 μ m \pm 30 μ m |
| Front Side (-) | Silicon nitride anti-reflection coating 0.7 mm silver busbar |
| Back Side (+) | Full surface aluminum back surface field 1.4 mm (silver) discontinuous soldering pads |

Cell Layout



S-156-5 ver.C

Monocrystalline Solar Cell

Electrical Characteristics

| Class | Efficiency Range (%) | Rated Power (Wp) | *Maximum Power Current (A) | *Short Circuit Current (A) | *Maximum Power Voltage (V) | *Open Circuit Voltage (V) |
|-------|----------------------|------------------|----------------------------|----------------------------|----------------------------|---------------------------|
| 194 | 19.4-19.5 | 4.740 | 8.801 | 9.384 | 0.540 | 0.642 |
| 195 | 19.5-19.6 | 4.764 | 8.839 | 9.385 | 0.541 | 0.643 |
| 196 | 19.6-19.7 | 4.789 | 8.858 | 9.386 | 0.542 | 0.643 |
| 197 | 19.7-19.8 | 4.813 | 8.871 | 9.390 | 0.544 | 0.644 |
| 198 | 19.8-19.9 | 4.838 | 8.893 | 9.392 | 0.546 | 0.645 |
| 199 | 19.9-20.0 | 4.862 | 8.908 | 9.395 | 0.547 | 0.645 |
| 200 | 20.0-20.1 | 4.886 | 8.915 | 9.398 | 0.550 | 0.646 |
| 201 | 20.1-20.2 | 4.911 | 8.932 | 9.406 | 0.551 | 0.646 |
| 202 | 20.2-20.3 | 4.935 | 8.953 | 9.425 | 0.552 | 0.647 |

Test condition : 1000 W / m², AM 1.5, 25°C Power measuring tolerance: ±1.5% rel.

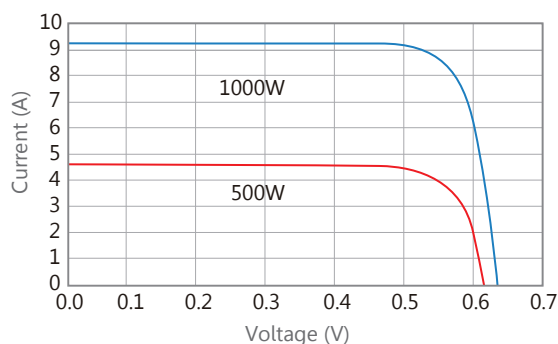
Temperature coefficients

| | |
|---------------|---------|
| Current (%/K) | 0.0454 |
| Voltage (%/K) | -0.3197 |
| Power (%/K) | -0.3960 |

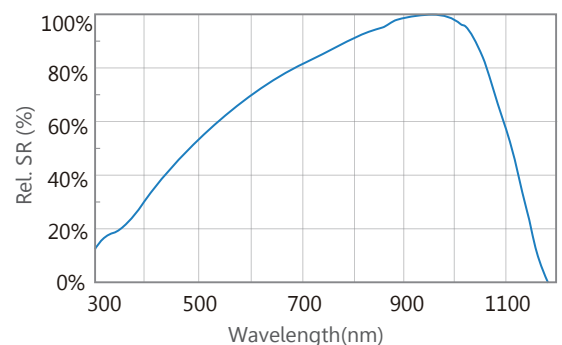
Light Intensity Dependence

| Intensity(W/m ²) | Vmpp(%) | Impp(%) |
|------------------------------|---------|---------|
| 1000 | 100.0 | 100.0 |
| 900 | 99.7 | 89.7 |
| 500 | 97.4 | 49.7 |
| 300 | 95.0 | 29.6 |
| 200 | 93.1 | 19.4 |

IV-Curve



Spectral Response



Solartech Energy Corp.



Taipei Office
 8F., No.760, Sec. 4, Bade Rd., Songshan Dist., Taipei 105, Taiwan
 Tel: +886-2-21712388 Fax: +886-2-21712387
 E-mail: sales@solartech-energy.com

Hsinchu HQ & Fab
 No.16, Guangfu N. Rd., Hsinchu Industrial Park, Hukou, Hsinchu 303, Taiwan
 Tel: +886-3-5276888 Fax: +886-3-5276866
 Web: www.solartech-energy.com