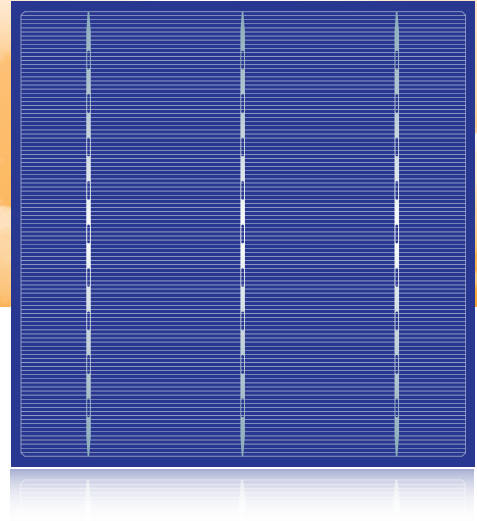


M-156-3 ver. M

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

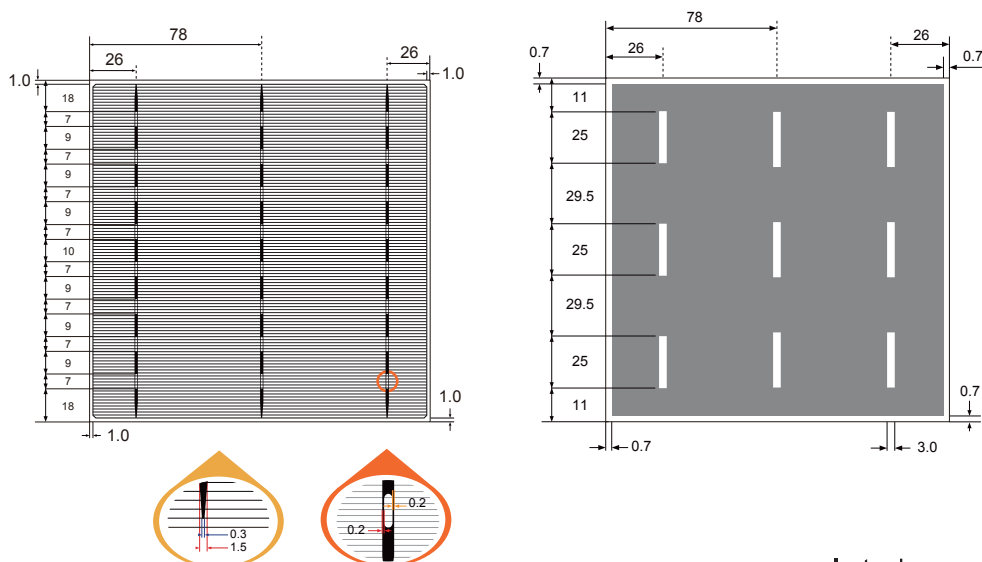
Performance and Quality

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

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 (si) | 180 μm - 20 / + 30 μm 200 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) discontinuous soldering pads |



M-156-3 ver. M / 6" Multicrystalline Solar Cell

Electrical Characteristics

| Class M-156 | 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 | 8.033 | 8.539 | 0.519 | 0.617 |
| 171 | 17.1~17.2 | 4.161 | 8.055 | 8.551 | 0.520 | 0.618 |
| 172 | 17.2~17.3 | 4.186 | 8.078 | 8.573 | 0.521 | 0.620 |
| 173 | 17.3~17.4 | 4.210 | 8.101 | 8.596 | 0.523 | 0.621 |
| 174 | 17.4~17.5 | 4.234 | 8.123 | 8.618 | 0.524 | 0.623 |
| 175 | 17.5~17.6 | 4.259 | 8.146 | 8.640 | 0.525 | 0.624 |
| 176 | 17.6~17.7 | 4.283 | 8.168 | 8.662 | 0.527 | 0.626 |
| 177 | 17.7~17.8 | 4.307 | 8.191 | 8.684 | 0.528 | 0.627 |
| 178 | 17.8~17.9 | 4.332 | 8.214 | 8.706 | 0.529 | 0.629 |
| 179 | 17.9~18.0 | 4.356 | 8.236 | 8.728 | 0.531 | 0.630 |
| 180 | 18.0~18.1 | 4.380 | 8.259 | 8.750 | 0.532 | 0.632 |
| 181 | 18.1~18.2 | 4.405 | 8.285 | 8.774 | 0.533 | 0.633 |
| 182 | 18.2~18.3 | 4.429 | 8.303 | 8.794 | 0.535 | 0.635 |
| 183 | 18.3~18.1 | 4.453 | 8.326 | 8.816 | 0.536 | 0.636 |
| 184 | 18.4~18.5 | 4.478 | 8.348 | 8.838 | 0.537 | 0.638 |
| 185 | 18.5~18.6 | 4.502 | 8.371 | 8.861 | 0.539 | 0.639 |

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

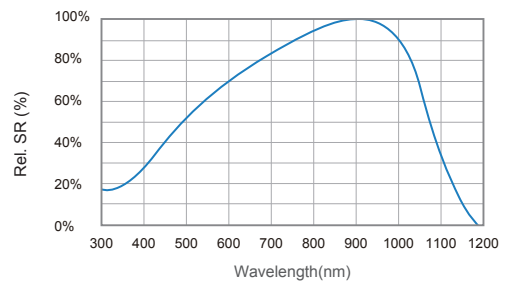
Temperature coefficients

| | |
|---------------|---------|
| Current (%/K) | 0.0516 |
| Voltage (%/K) | -0.3324 |
| Power (%/K) | -0.4085 |

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

