



# P-Type Mono Bifacial Cell

## MS-MSC182-10D10B



### Product Feature

High conversion efficiency  $\geq 23.3\%$   
Bifaciality  $\geq 70\%$   
LID (Light Induced Degradation)  $\leq 2.5\%$   
High resistance of PID (Potential Induced Degradation)  
Power temperature coefficient  $\leq -0.35\%/K$   
Weak light response ( $200W/m^2$ )  $\geq 95\%$   
Lower CTM loss, better for the high efficiency module

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### Quality Control

Efficiency test accuracy is  $\pm 0.1\%$   
100% automatic inspection of IV/EL/Appearance  
Calibration Cell source to Fraunhofer ISE

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### Management System Certification

ISO 9001:2015 Quality Management System  
ISO 14001:2015 Environmental Management System  
ISO 45001:2018 Occupational Health and Safety Management System

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## Product Features

|                |                                                                                                                                                 |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Dimension      | 182mmx182mm±0.25mm, Φ247mm±0.25mm                                                                                                               |
| Cell Thickness | 175μm±20μm                                                                                                                                      |
| Front side     | Adopt 10 bus bars two-slice structure, pad point width 1.0mm-1.5mm, 136±10 fingers, and the front side is covered with SiN anti-reflection film |
| Back side      | The back bus bars is 1.9 ±0.4mm, covering the fingers                                                                                           |



## Temperature Coefficients

|                                 |                       |
|---------------------------------|-----------------------|
| Current Temperature Coefficient | Tkcurrent: +0.048 %/K |
| Voltage Temperature Coefficient | Tkvoltage: -0.28 %/K  |
| Power Temperature Coefficient   | Tkpower: -0.35 %/K    |



## Electrical Data

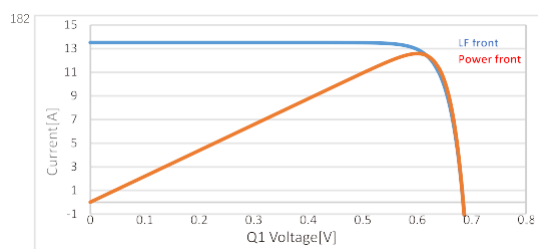
| Eff(%) | Pmpp(W) | Ump(V) | Impp(A) | Uoc(V) | Isc(A) | FF(%) |
|--------|---------|--------|---------|--------|--------|-------|
| 23.3   | 7.69    | 0.613  | 12.549  | 0.690  | 13.583 | 82.08 |
| 23.2   | 7.66    | 0.612  | 12.515  | 0.689  | 13.568 | 81.93 |
| 23.1   | 7.63    | 0.611  | 12.482  | 0.688  | 13.551 | 81.80 |
| 23.0   | 7.59    | 0.611  | 12.428  | 0.688  | 13.498 | 81.77 |
| 22.9   | 7.56    | 0.610  | 12.394  | 0.687  | 13.479 | 81.65 |
| 22.8   | 7.53    | 0.610  | 12.340  | 0.687  | 13.449 | 81.47 |
| 22.7   | 7.49    | 0.608  | 12.326  | 0.686  | 13.419 | 81.41 |
| 22.6   | 7.46    | 0.607  | 12.292  | 0.686  | 13.407 | 81.13 |
| 22.5   | 7.43    | 0.607  | 12.238  | 0.685  | 13.397 | 80.95 |
| 22.4   | 7.40    | 0.606  | 12.204  | 0.685  | 13.388 | 80.64 |
| 22.3   | 7.36    | 0.605  | 12.169  | 0.684  | 13.358 | 80.58 |

- Standard Test Conditions: 1000W/ m<sup>2</sup>, AM 1.5, 25°C

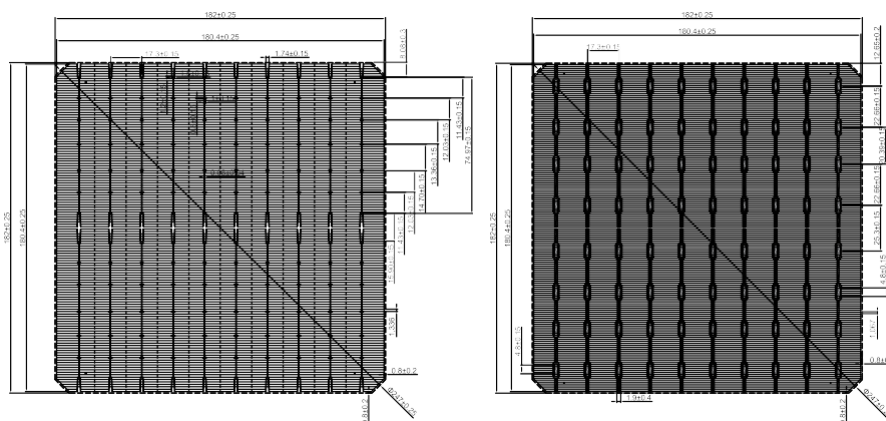
Specifications and data are only for reference.



## IV Curve



## Dimension



Front side

Rear side



## Spectral Response (SR)

| Intensity(W/m <sup>2</sup> ) | Uoc   | Isc   |
|------------------------------|-------|-------|
| 1000                         | 1.000 | 1.000 |
| 800                          | 0.991 | 0.801 |
| 600                          | 0.989 | 0.601 |
| 400                          | 0.962 | 0.402 |