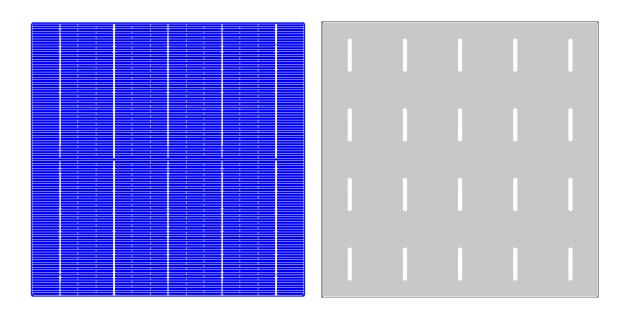
## 158KSMP-05

# SQUARE MONO+PERC+SE+5BB SQUARE MONO CRYSTALLINE SILICON SOLAR CELLS Half-Cut/Full Pattern



## PRODUCT DESCRIPTION

- ◆ The average efficiency is above 22.50%, high efficient mono cells with the same type of industrialization in the market.
- ◆ 5BB design gets higher FF, lower Rs, and higher efficiency.
- ◆ Large size wafer, the effective illumination area is larger, and the power of the modules is significantly increased.
- ◆ SE process reduces the surface carrier recombination and enhances the shortwave spectral response of the solar cell.
- ◆ Increasing the absorbing ability under low- intensity irradiation by PERC process, improving the efficiency of cells under different environments.
- ◆ CIR process decreases the LID/LeTID, makes sure the stable power output.
- ◆ Hot-spot inspection strictly, avoids loss of efficiency and reliability.
- ◆ AOI makes sure the better color uniformity of cells and modules.

### **TECHNICAL DATA**

# MECHANICAL DIMENSION

Size 158.75mm×158.75mm±0.25mm

Thickness 180µm±18µm

Front (-) Front side busbar width 0.7±0.1mm

Rear (+) Rear side busbar width 1.6±0.3mm

## TEMPERATURE COEFFICIENT

TkVoltage -0.37%/K

TkCurrent +0.07%/K

TkPower -0.36%/K

#### LOW-INTENSITY IRRADIATION

| Insol<br>(W/m2) | lsc/lsc0 | Voc/Voc0 | Pmpp/Pmpp0 |  |
|-----------------|----------|----------|------------|--|
| 1000            | 1.0      | 1.00     | 1.0        |  |
| 800             | 0.8      | 0.99     | 0.8        |  |
| 600             | 0.6      | 0.98     | 0.6        |  |
| 400             | 0.4      | 0.96     | 0.4        |  |
| 200             | 0.2      | 0.93     | 0.2        |  |

#### **ELECTRICAL PROPERTY**

| Eta  | Pmpp | Umpp  | Impp  | Voc    | Isc    | FF    |
|------|------|-------|-------|--------|--------|-------|
| (%)  | (W)  | (V)   | (A)   | (V)    | (A)    | (%)   |
| 22.6 | 5.70 | 0.583 | 9.769 | 0.6830 | 10.229 | 81.52 |
| 22.5 | 5.67 | 0.582 | 9.743 | 0.6820 | 10.213 | 81.41 |
| 22.4 | 5.65 | 0.581 | 9.716 | 0.6810 | 10.197 | 81.29 |
| 22.3 | 5.62 | 0.580 | 9.690 | 0.6800 | 10.181 | 81.18 |
| 22.2 | 5.59 | 0.579 | 9.663 | 0.6790 | 10.165 | 81.06 |
| 22.1 | 5.57 | 0.578 | 9.636 | 0.6780 | 10.148 | 80.95 |
| 22.0 | 5.54 | 0.577 | 9.609 | 0.6770 | 10.129 | 80.85 |
|      |      |       |       |        |        |       |

Standard test condition: 1000W/m<sup>2</sup>,AM1.5,25°C.

The right to interpret the above dynamic changes of technical parameters belongs to XF SOLAR Co.,Ltd.

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