

# ExcelTon III, 6" Mono-crystalline, 4BB, Solar Cell

#### Characteristics

Quality

Dimensions 156.75mm x 156.75mm ± 0.25mm,

With 210mm ± 0.25mm diagonal

Thickness(Si)  $180\mu m \pm 20\mu m / 200\mu m \pm 20\mu m$ Front

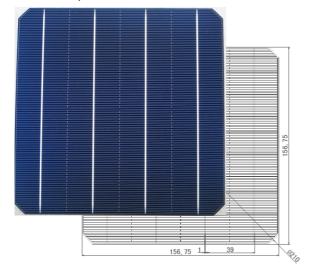
Silver bus bars; Blue/Purple

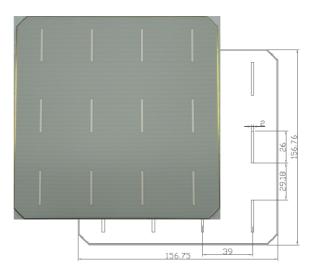
Silicon nitride anti-reflection coating

Silver bus bars; Full-surface aluminum BSF **Back** 

#### **Features**

- 1. 2.2% larger area & power for same efficiency bin
- 2. High conversion efficiency
- 3. Improved red response
- 4. Advanced passivation technology
- 5. Excellent solder-ability and adhesion strength
- 6. Low breakage rate
- 7. Good color uniformity
- 8. Vacuum package to avoid oxidation
- 9. Four bus bars to reduce series resistance and improve module power
- 1. PID free 2. Both efficiency and Impp sorting to enhance module output power.
  - 3. 100% in-line inspection of optical, Irev (<2.0A @ -10V, <2.5A @ -12V) and Rsh (>10 ohm).
  - 4. Long term efficiency stability and excellent reliability.
  - 5. ISO 9001, ISO 14001 and OHSAS 18001 certified.





Efficiency Code	Efficiency (%)	Charged Power (Wp)	I <sub>mp</sub> (A)	V <sub>mp</sub> (V)	I <sub>sc</sub> (A)	Voc (V)
ETS6-2110	21.10%	5.16	9.26	0.557	9.86	0.659
ETS6-2100	21.00%	5.13	9.25	0.555	9.85	0.658
ETS6-2090	20.90%	5.11	9.23	0.554	9.85	0.657
ETS6-2080	20.80%	5.08	9.21	0.552	9.84	0.656
ETS6-2070	20.70%	5.06	9.20	0.550	9.82	0.654
ETS6-2060	20.60%	5.03	9.18	0.548	9.80	0.653
ETS6-2050	20.50%	5.01	9.17	0.546	9.79	0.650
ETS6-2040	20.40%	4.98	9.16	0.543	9.78	0.649
ETS6-2030	20.30%	4.96	9.15	0.542	9.76	0.646
ETS6-2020	20.20%	4.94	9.14	0.540	9.75	0.643

<sup>\*</sup> Under standard test condition: 1000W / m<sup>2</sup>, AM 1.5, 25°C

<sup>\*</sup> Average accuracy of all tested figures is ±1.0% rel.

Temperature Coefficient					
Current (Alpha)	0.043%/℃				
Voltage (Beta)	-0.317%/℃				
Power (Gamma)	-0.439%/℃				

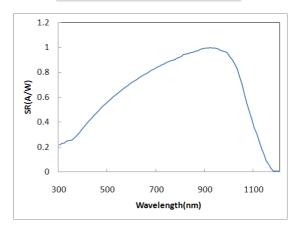
Light Intensity (W/m²)	Voc	Isc
1000	1.000	1.0
800	0.989	0.8
600	0.976	0.6
400	0.956	0.3
300	0.951	0.3

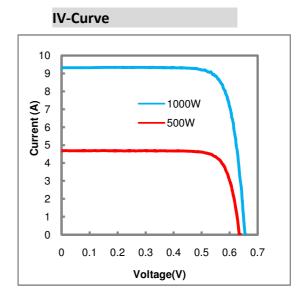
>1.2N/mm for 70% measured points

These results can be obtained by soldering at 250-350  $^\circ$ C with Eton regular flux, ribbon (Pb free), soldering & pulling machine.

Results may vary by different flux, ribbons, soldering method used.

### **Spectrum Response (SR)**





#### **Packaging**

The goods are packed into the container with good quality, which protects them from damage during the transportation. Every 100 cells are sealed by vacuum package.

#### **Handling**

Avoid handlings happened as follows because they may cause electrical or soldering performance degradation.

- a. Avoid handling with hands without plastic gloves
- b. Avoid careless and violent handling since this causes damage or cracks
- c. Contacting with corrosive chemicals or gases
- d. Scrubbing the surface

#### **Storage**

Keeping away from corrosive chemicals or gases and keeping in the storage room with temperature at 25±5°C, humidity less than 65%. Do not expose cells to the air. It is recommended to use the cells ASAP after unpacking.

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