

ExcelTon III, 6" Mono-crystalline, 3BB, Solar Cell

Characteristics

Dimensions 156.75mm x 156.75mm ± 0.25mm,

With 205mm ± 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

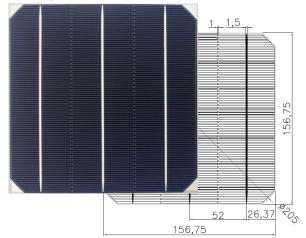
Back Silver bus bars; Full-surface aluminum BSF

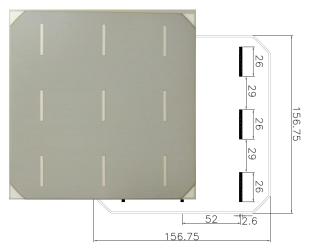
Features

- 1. 1.6% 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. Three bus bars to reduce series resistance and improve module power

Quality

- 1. PID free
- 2. Both efficiency and Impp sorting to enhance module output power.
- 3. Average cell efficiency is 20.0%; module power (Wp)>275W (6x10)
- 4. 100% in-line inspection of optical, Irev (<2.0A @ -10V, <2.5A @ -12V) and Rsh (>10 ohm).
- 5. Long term efficiency stability and excellent reliability.
- 6. ISO 9001, ISO 14001 and OHSAS 18001 certified.





Efficiency Code	Efficiency (%)	Charged Power (Wp)	I _{mp} (A)	V _{mp} (V)	I _{sc} (A)	Voc (V)
ETS6-2060	20.60%	5.00	9.09	0.549	9.63	0.656
ETS6-2050	20.50%	4.98	9.07	0.548	9.62	0.655
ETS6-2040	20.40%	4.95	9.05	0.547	9.61	0.654
ETS6-2030	20.30%	4.93	9.03	0.546	9.60	0.654
ETS6-2020	20.20%	4.91	9.01	0.545	9.59	0.653
ETS6-2010	20.10%	4.88	8.99	0.544	9.58	0.653
ETS6-2000	20.00%	4.86	8.97	0.543	9.57	0.651
ETS6-1990	19.90%	4.83	8.95	0.541	9.56	0.650
ETS6-1980	19.80%	4.81	8.94	0.540	9.55	0.650
ETS6-1970	19.70%	4.78	8.92	0.538	9.54	0.649
ETS6-1960	19.60%	4.76	8.90	0.536	9.53	0.648

^{*} Under standard test condition: 1000W / $\rm m^2$, AM 1.5, 25 $^{\circ}$ C

^{*} 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

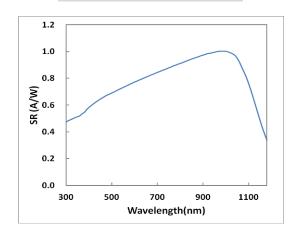
Solderability >1.2N

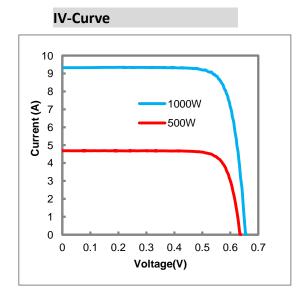
>1.2N/mm for 70% measured points

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

 $Keeping \ away \ from \ corrosive \ chemicals \ or \ gases \ and \ keeping \ in \ the \ storage \ room \ with \ temperature \ at \ 25\pm5^{\circ}C, \ humidity \ less \ than \ 65\%.$

Do not expose cells to the air. It is recommended to use the cells ASAP after unpacking.

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