

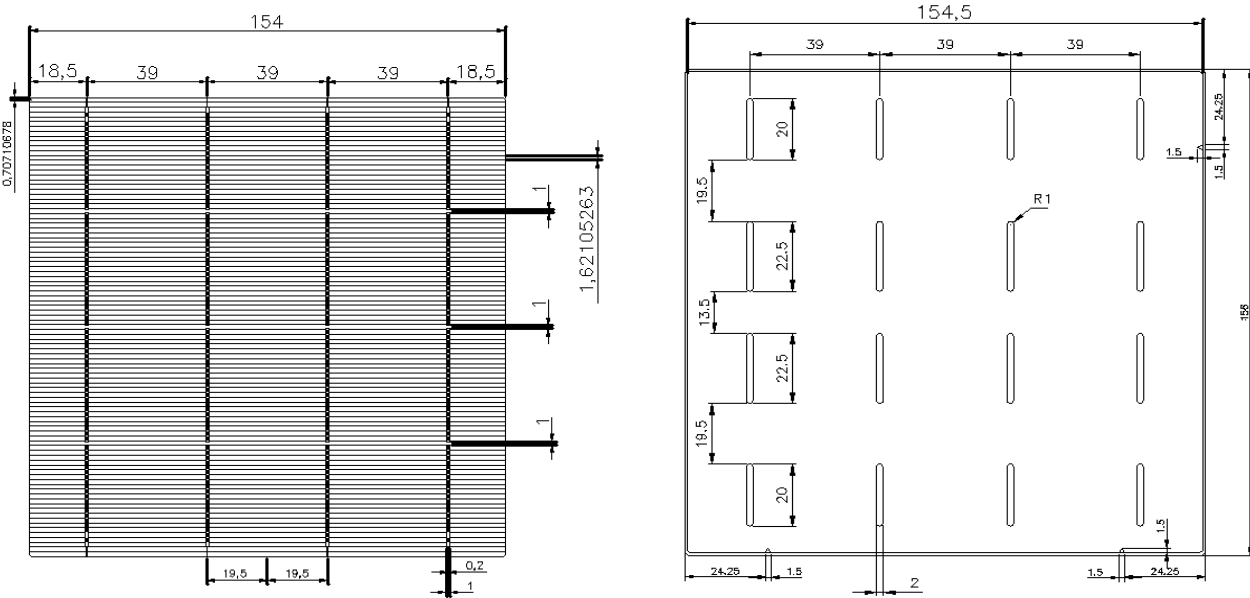
Fullstar solar 4BB Anti-Pid Poly Cells

Fullstar solar's High-efficiency Poly Cells using Black Silicon Technology. Manufacturing modules with more than 260Wp(6*10)and 310Wp(6*12) Power output becomes easier than ever. Meantime the anti-PID cell technology reduces the module attenuation caused by induced electric potential, and the system power attenuation caused by the high temperature ,humidity and salt atmosphere.

MECHANICAL DATA AND DESIGN

TEMPERATURE COEFFICIENTS

Format	156mm*156mm±0.5mm
Thickness	200±20um
Front(-)	1.0mm bus bars(silver).blue anti-reflecting coating(silicon nitride)
Back(+)	2.0mm wide soldering pads(silver)back surface field (aluminum)



INTENSITY DEPENDENCE

Intensity [w/m ²]	Isc	Voc	Pmpp
1000	1.00	1.00	1.00
900	0.90	0.99	0.90
800	0.80	0.99	0.79
500	0.50	0.97	0.49
300	0.30	0.94	0.29
200	0.20	0.91	0.19

Ratio of Voc(Isc)at reduced intensity to Voc(Isc) at 1000w/m²

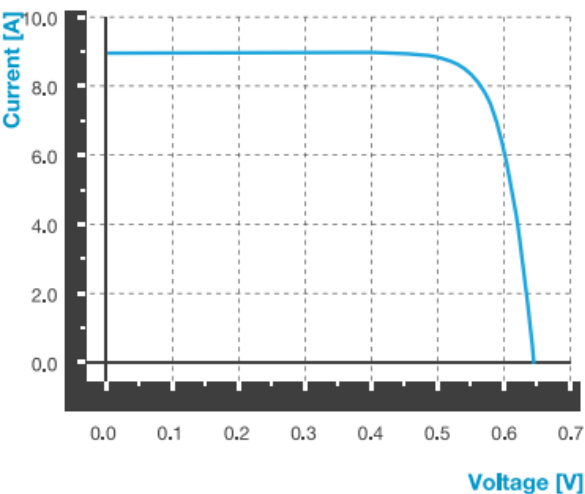
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ELECTRICAL CHARACTERISTIC

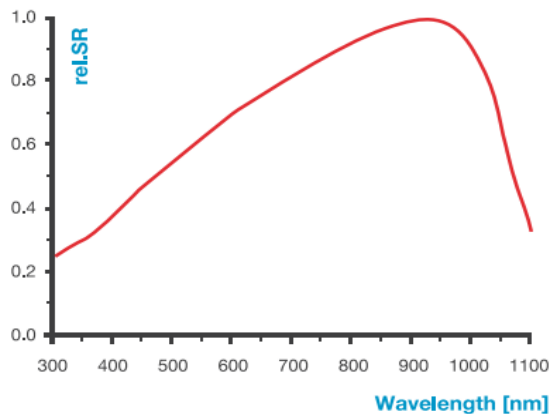
Tk voltage	-0.35%/k
Tk current	+0.06%/k
Tk power	-0.42%/k

No.	Efficiency(%)	Pmpp (W)	Umpp (V)	Imp (A)	Uoc (V)	Isc (A)	FF (%)
01	18.90-19.20	4.60	0.538	8.543	0.637	9.101	79.31
02	18.80-18.90	4.58	0.537	8.513	0.636	9.071	79.39
03	18.70-18.80	4.55	0.536	8.487	0.635	9.043	79.23
04	18.60-18.70	4.53	0.535	8.463	0.634	9.020	79.17
05	18.50-18.60	4.50	0.541	8.306	0.643	8.825	79.31
06	18.40-18.50	4.48	0.540	8.277	0.642	8.806	79.29
07	18.30-18.40	4.45	0.539	8.256	0.640	8.785	79.22
08	18.20-18.30	4.43	0.538	8.238	0.638	8.765	79.16
09	18.10-18.20	4.40	0.536	8.220	0.637	8.746	79.08
10	18.00-18.10	4.38	0.534	8.200	0.635	8.725	79.00

IV CURVE



SPECTRAL RESPONSE



- High photoelectric conversion ,high reliability .
- The unique expansion technology ensures the uniformity .
- The advanced PECVD technology makes the dark blue silicon nitride antireflection film beautiful uniform.
- The high-quality metal slurry made back surface field and electrode ensure the good electrical conductivity ,reliable adhesion and good weldability.
- High precision silk screen printing and flatness makes the cell apply for the auto weld and laser cutting.
- The module adopt the non-anti-PID EVA,85% °C,96H,-1000V, and leads the attenuation ≤5% .