



## Solar cells

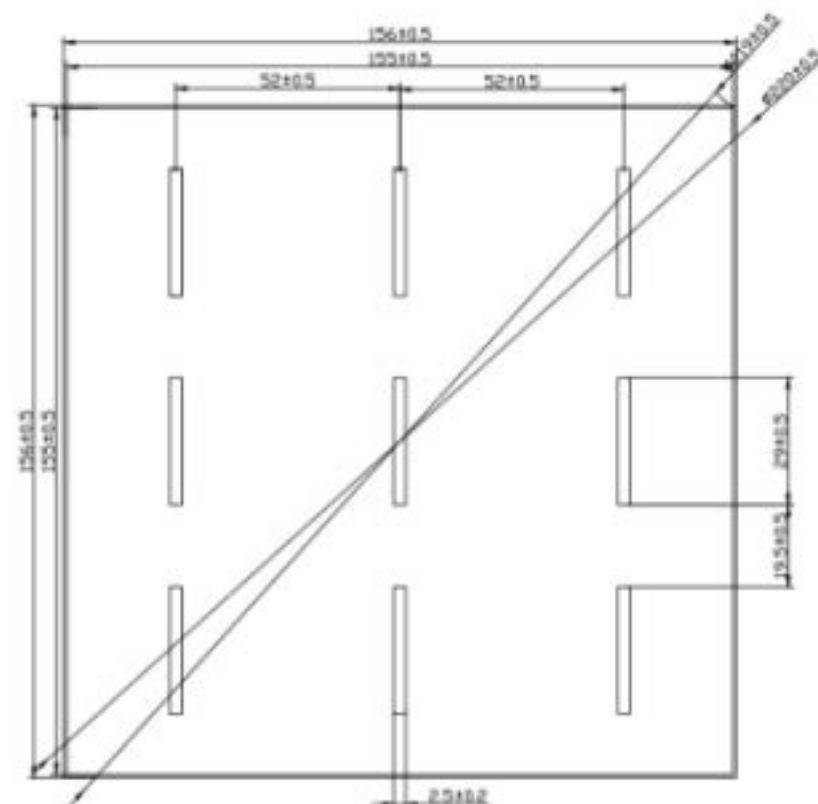
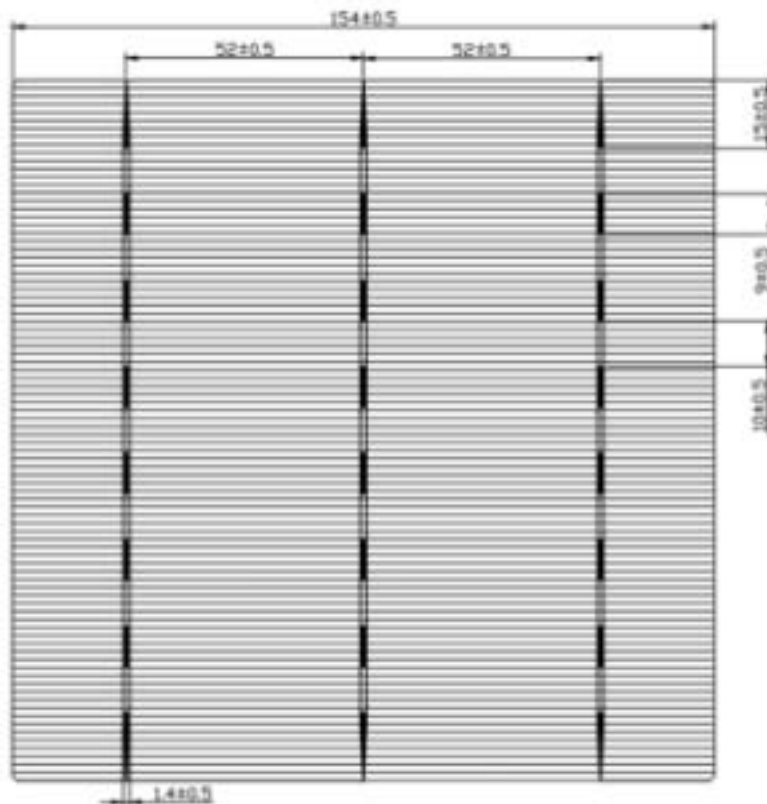
Poly 156 X 156 mm<sup>2</sup> 156 poly-crystalline solar cell

### Mechanical Data and Design

Dimension	156mm X 156mm ± 0.5mm
Thickness ( Wafer )	180 μm ± 20 μm
Front	Three 1.4mm busbars, alkaline textured surface, blue anti-reflection coating (silicon nitride)
Back	Three 2.0mm wide soldering pads, back surface field ( aluminum )

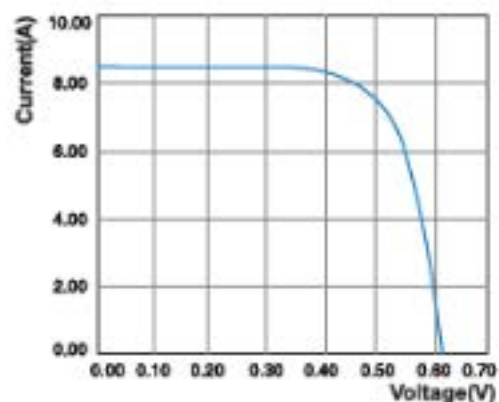
### Temperature Coefficient

Voc.Temp.coeff. %/K	-0.336
Isc.temp.coeff. %/K	+0.043
Pm.temp.coeff. %/K	-0.410

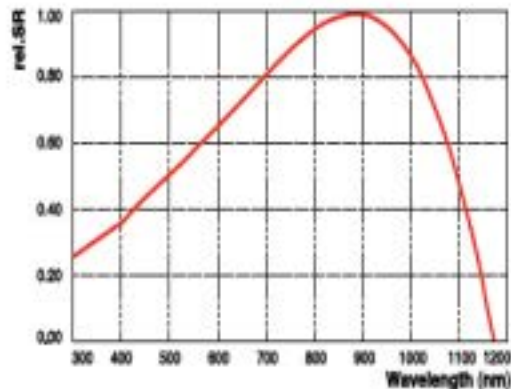


Class	Efficiency(%)	$P_{mpp}$ (W)	$U_{mpp}$ (V)	$I_{mpp}$ (A)	$U_{oc}$ (V)	$I_{sc}$ (A)	FF (%)
10	18.20-18.40	4.43	0.538	8.24	0.638	8.76	79.3
9	18.00-18.20	4.38	0.535	8.2	0.636	8.7	79.16
8	17.80-18.00	4.35	0.532	8.19	0.634	8.68	79.05
7	17.60-17.80	4.31	0.529	8.14	0.632	8.64	78.93
6	17.40-17.60	4.26	0.526	8.09	0.629	8.59	78.88
5	17.20-17.40	4.2	0.523	8.04	0.626	8.52	78.74
4	17.00-17.20	4.16	0.521	7.99	0.623	8.5	78.65
3	16.80-17.00	4.11	0.518	7.94	0.621	8.43	78.56
2	16.60-16.80	4.06	0.516	7.88	0.618	8.39	78.39
1	16.40-16.60	4.02	0.514	7.83	0.615	8.36	78.19

IV Curve



Spectral Response



Intensity Dependence

Intensity ( $W/m^2$ )	$I_{sc}$ (rel.)	$V_{oc}$ (rel.)
1000	1.00	1.000
900	0.90	0.989
500	0.50	0.963
300	0.30	0.939
200	0.20	0.920