

潞安多晶硅太阳能电池 Lu'An multicrystalline silicon solar cell

• 电气特性 Electrical Characteristics

Grade	Eff(%)	Pmpp(W)	Vmpp(mV)	Impp(A)	Voc(mV)	Isc(A)
1	18.9	4.64	538	8.63	635	9.12
2	18.8	4.62	537	8.61	634	9.10
3	18.7	4.59	536	8.57	633	9.08
4	18.6	4.57	534	8.55	631	9.06
5	18.5	4.55	533	8.53	630	9.04
6	18.4	4.52	532	8.50	629	9.03
7	18.3	4.50	531	8.47	628	9.02

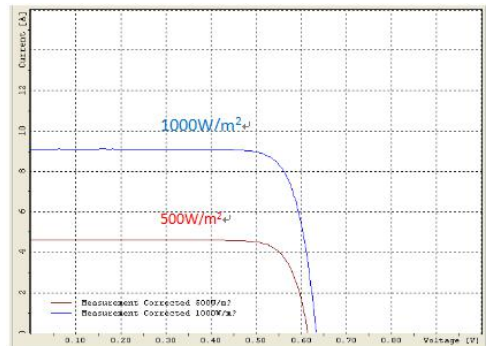
The Efficiency absolute tolerance is $\pm 0.1\%$ referred to the measured performance.

All technical data at Standard Test Conditions(STC): Irradiance level $1000\text{W}/\text{m}^2$ spectrum AM1.5 and cell temperature 25°C

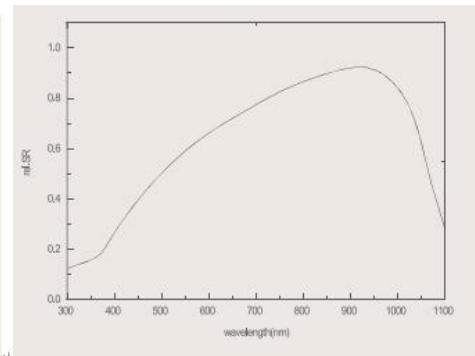
• 温度系数 Temperature coefficients

开路电压温度系数 Temperature coefficients of open circuit voltage: $-0.32\%/K$
 短路电流温度系数 Temperature coefficients of short circuit current: $+0.02\%/K$
 最大功率温度系数 Temperature coefficients of maximum power: $-0.50\%/K$

• I-V 曲线与光谱响应 I-V Curve and Special Response



I-V 曲线



光谱响应

• 机械特征 Mechanical characteristics

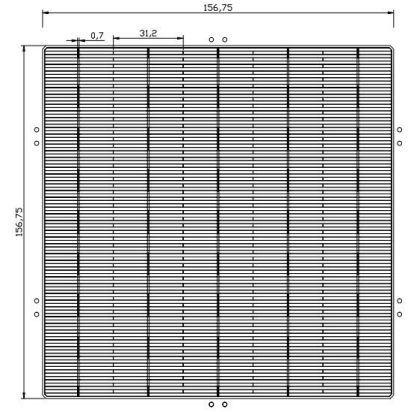
尺寸 size: $156.75 \times 156.75 \pm 0.25\text{mm}$

厚度 thickness: $195 \pm 15 \mu\text{m}$

电池正面 覆盖有深蓝色氮化硅减反射膜; 5

Front(-): 根镂空主栅线, 106 根副栅线。

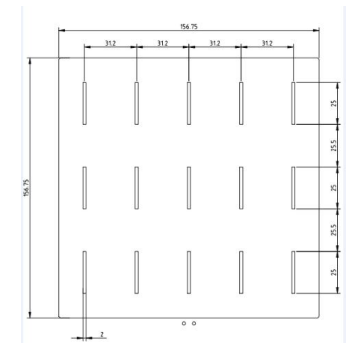
Covered with dark blue silicon nitride anti-reflection coating; 5 hollowed-out busbars of 1mm width and 106 fingers



电池背面

Back(+): 覆盖有铝背场; $25 \times 2\text{mm}$ 背银焊接衬底 15 个。

Covered with Aluminun BSF; 15 welded substrate (silver) of $25 \times 2\text{mm}$ size.



图片仅供参考 For referece only

• 光强关系 Light Intensity Dependence

Intensity(W/m^2)	Voc	Isc
1000	1.000	1.0
800	0.992	0.8
600	0.990	0.6
200	0.939	0.2
100	0.909	0.1