Specifications of amorphous silicon thin film PV module

PV module is a thin film photovoltaic module with amorphous silicon (a-Si) devices monolithically integrated. The electrical specifications shown below are stabilized values measured at Standard Report Conditions: 1000W/m^2 irradiance, AM1.5 spectrum at 25℃ while Voc or Isc can be customized.

Maximum power rating under standard report conditions:	W_P = 40 W ± 3 %
Rated operating voltage:	V_m = 41 V ± 3 %
Rated operating current:	I_m= 0.98 A ± 5 %
Open circuit voltage:	V_{oc} = 56V ± 5 %
Short circuit current:	I_{sc} = 1.21 A ± 5 %
Temperature coefficients:	P_m = – 0.2% / °C
Bypass diode:	6 A 1000 V
Maximum system voltage:	600 V
Lateral structuring:	Laser pattern
Fixture:	Aluminum frame or frameless
Dimensions: Width x Length x Depth	25 inch x 49 inch x 0.275 inch (635mm x 1245 mm x 7 mm)
Temperature Range:	– 40°C to +85°C
Weight:	30 lbs. (13.7 kg)

Output of electricity in the first few months of operation will exceed the specified ratings around 20% for power output.

Other factors, such as operation at higher temperature, change of spectrum and other relevant factors may cause actual performance to vary up to 10% from **rated parameters.**

Module is glass to glass laminated.

IEC61646, IEC61730-2 qualification, TÜV and UL testing are pending.

Twenty years limited warranty.

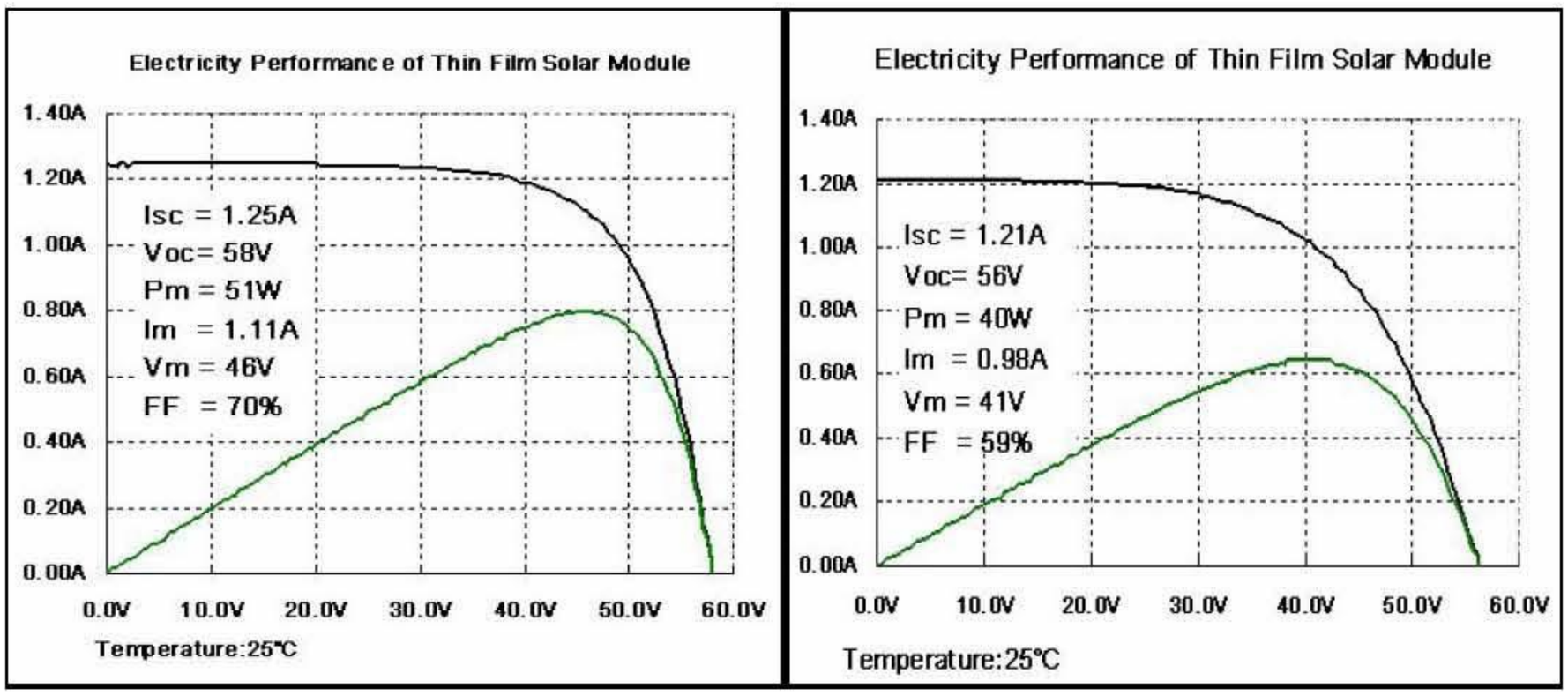

Fig. 1 Initial IV curve

Fig. 2 Stabilized IV curve

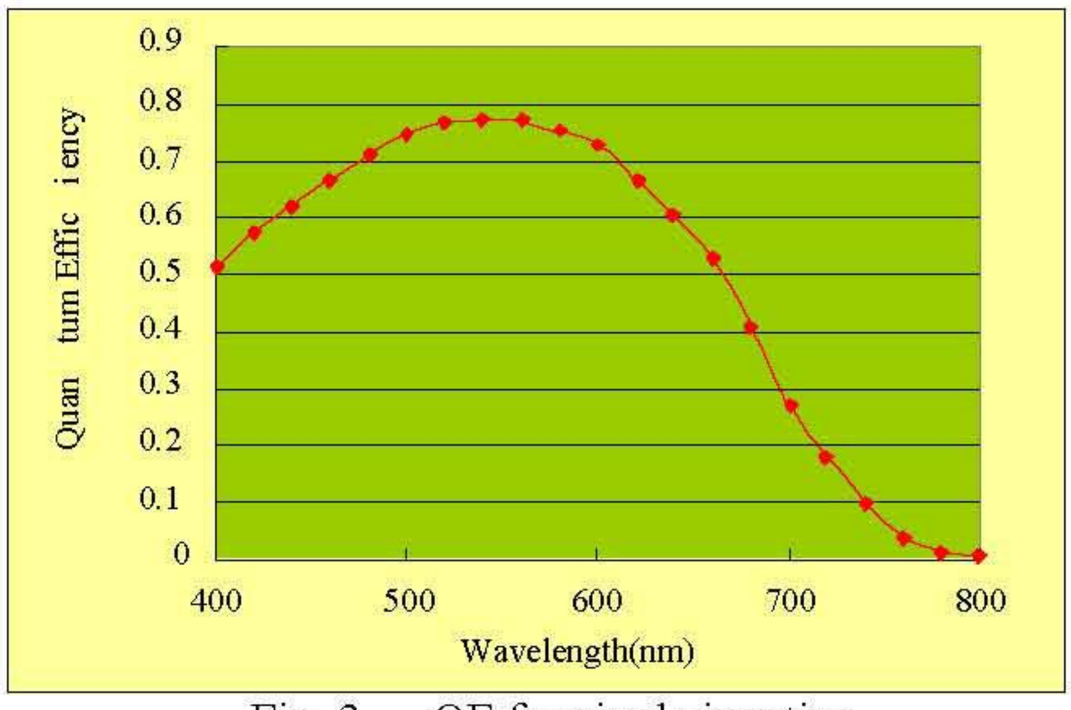

Fig. 3 QE for single junction

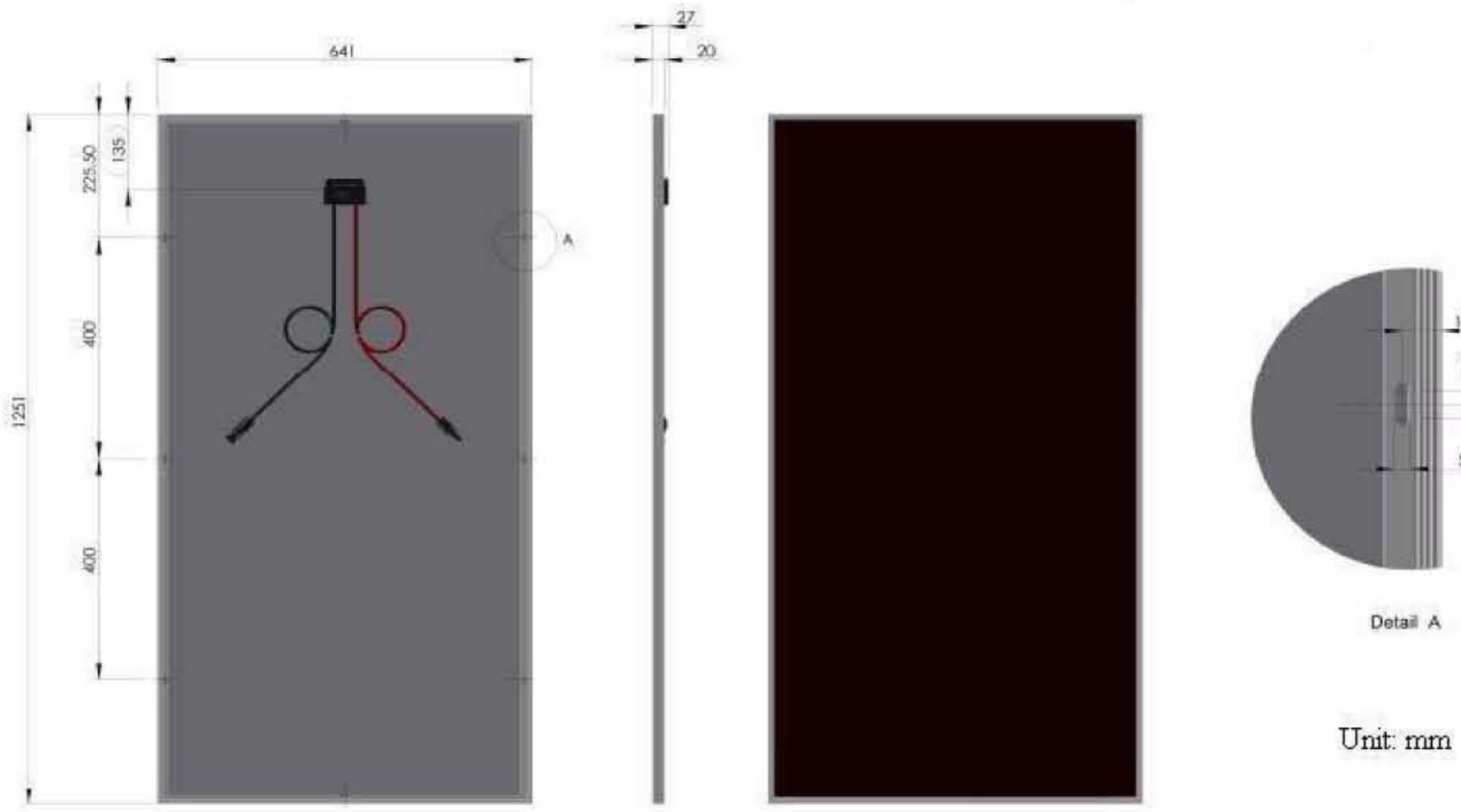

Fig. 4 Physical dimension

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