

\*For reference only

## MECHANICAL DATA AND DESIGN

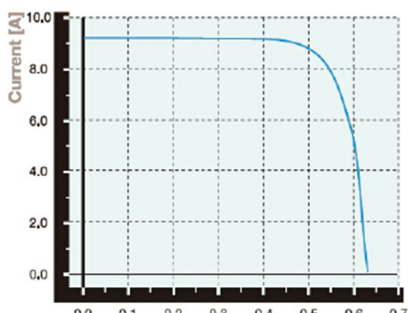
Format	156mm×156mm±0.5mm
Thickness	200μm±20μm
Front(-)	1.5mm bus bars(silver),blue anti-reflecting coating(silicon nitride)
Back(+)	2mm wide soldering pads(silver),back surface field(aluminum)

## TEMPERATURE COEFFICIENTS

TkVoltage	-0.241%/K
TkCurrent	+0.033%/K
TkPower	-0.37%/K

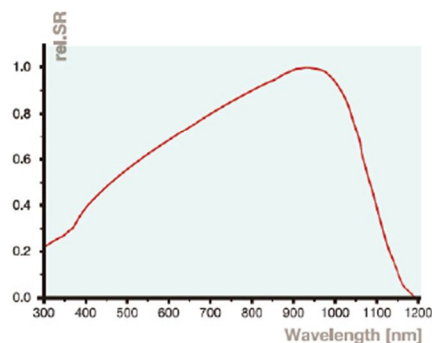
No.	10	09	08	07	06	05	04	03	02	01
Efficiency(%)	19.00-19.20	18.80-19.00	18.60-18.80	18.40-18.60	18.20-18.40	18.00-18.20	17.80-18.00	17.60-17.80	17.40-17.60	17.20-17.40
Pmpp(W)	4.54	4.49	4.45	4.40	4.35	4.30	4.26	4.21	4.16	4.11
Umpp(V)	0.544	0.543	0.542	0.539	0.536	0.532	0.528	0.524	0.520	0.518
Impp(A)	8.359	8.302	8.243	8.201	8.163	8.135	8.106	8.072	8.034	7.983
Uoc(V)	0.643	0.643	0.642	0.640	0.638	0.636	0.635	0.634	0.634	0.634
Isc(A)	8.891	8.857	8.803	8.764	8.738	8.727	8.716	8.701	8.696	8.683
FF(%)	79.56	79.13	79.02	78.81	78.44	77.90	77.26	76.66	75.81	75.15

## IV CURVE



\*calibrated against fraunhofer ISE freiburg Voltage [V]

## SPECTRAL RESPONSE



## INTENSITY DEPENDENCE

Intensity [W/m <sup>2</sup> ]	Isc*	Voc*
1000	1.0	1.000
900	0.9	0.995
500	0.5	0.969
300	0.3	0.946
200	0.2	0.926

\*Ratio of Voc(Isc) at reduced intensity to Voc(Isc) at 1000 W/m<sup>2</sup>