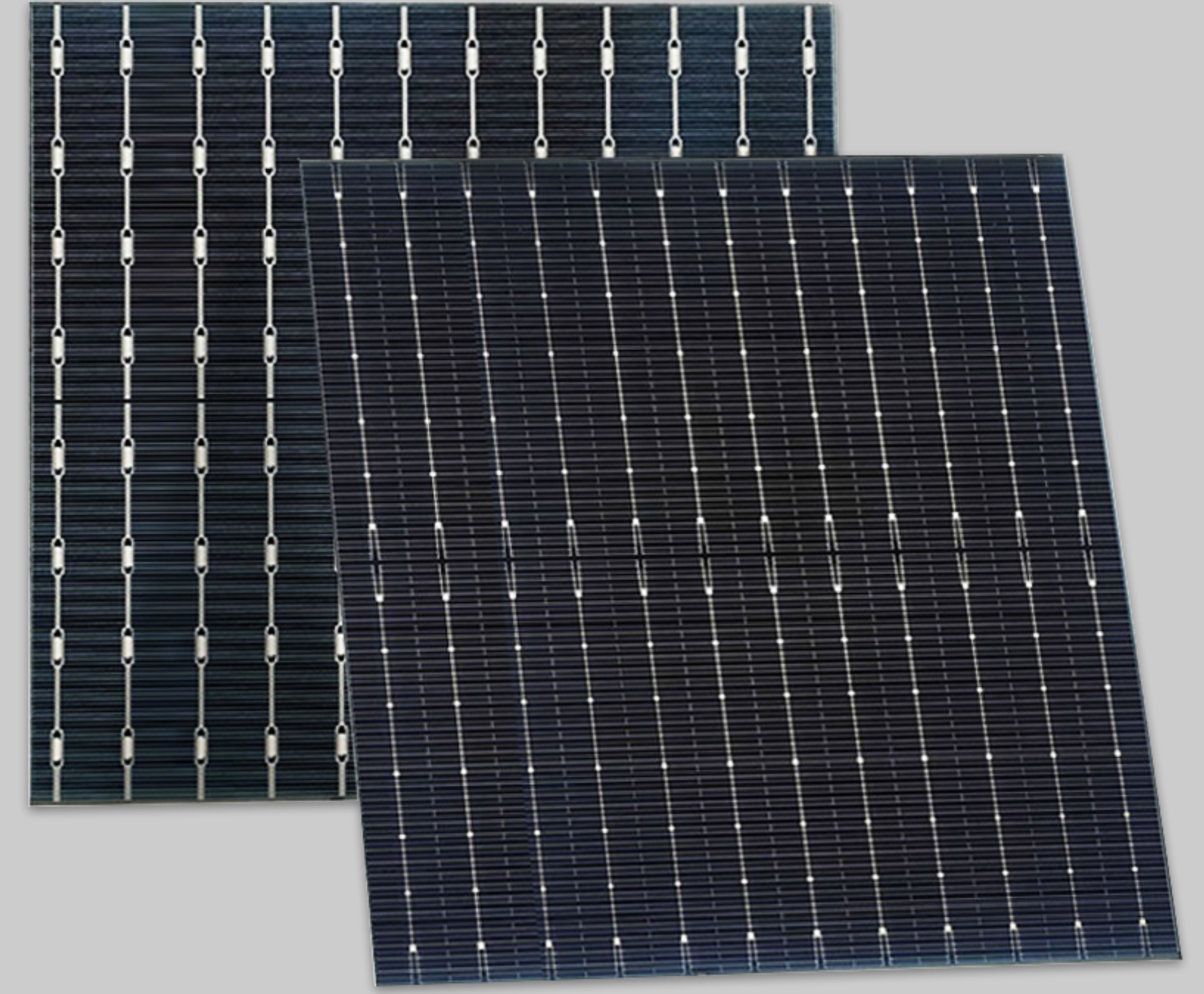


## DM Solar Cell

# DM-P-210-12BB

Mono-crystalline Bi-facial Solar Cell



### Technical Data And Design

Substrate material	P-type mono-crystalline silicon wafer-PERC
Cell thickness	160 $\mu$ m $\pm$ 16 $\mu$ m
Dimension	210mm*210mm $\pm$ 0.5mm
Diagonal	295mm $\pm$ 0.5mm
Front (-)	12*0.05mm $\pm$ 0.03mm bus bars (silver) 196 lines, Silicon oxide + blue silicon nitride compound anti reflection coating(PID Free)
Back (+)	1.4 $\pm$ 0.3mm wide soldering pads (silver) , 186 lines, Silicon oxynitride and Aluminum lines back surface field, Laser design of vertical bus bars

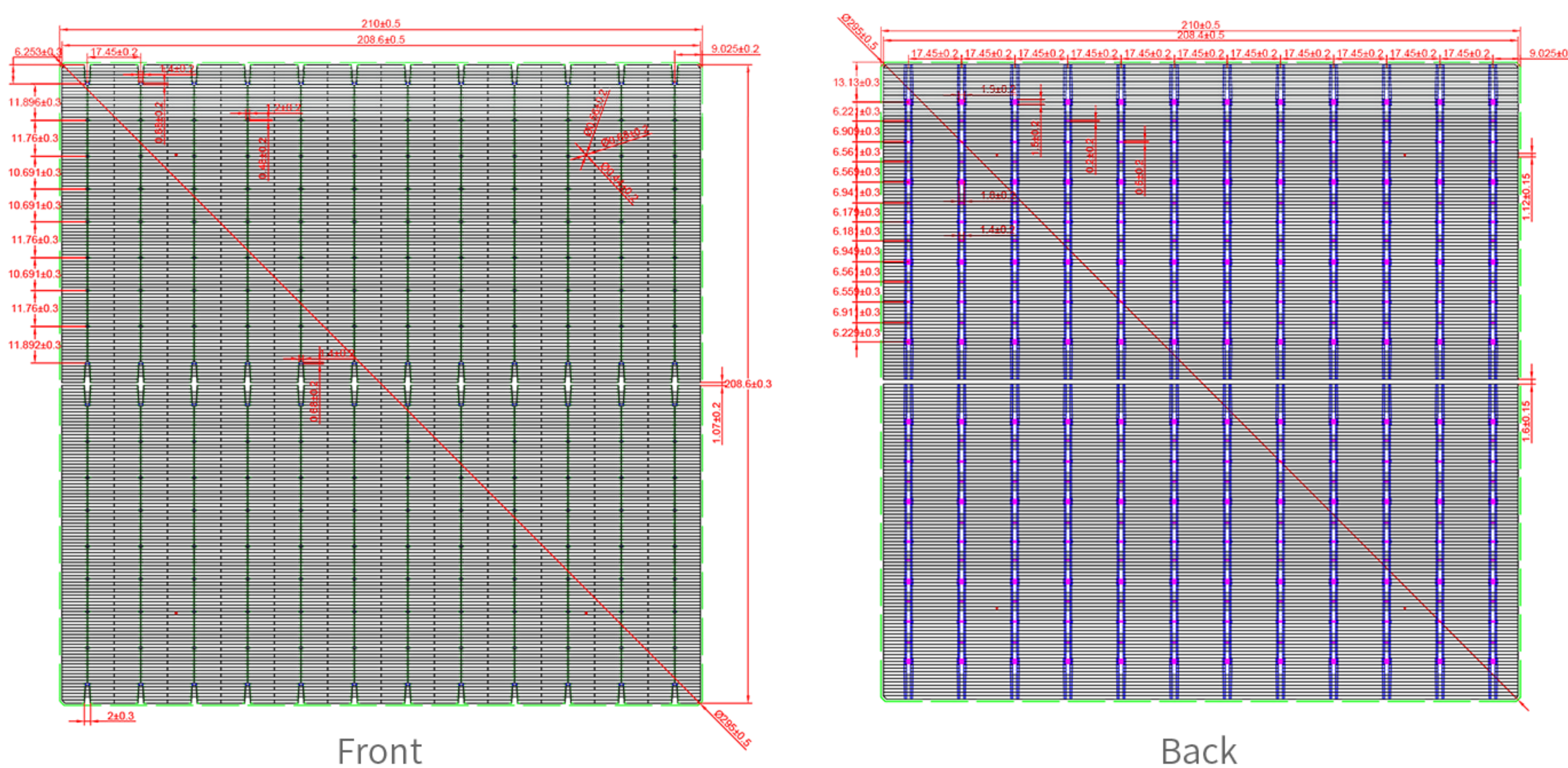
### Temperature coefficients

TKVoc (%/K)	-0.36
Tklsc (%/K)	+0.07
TkPower (%/K)	-0.38

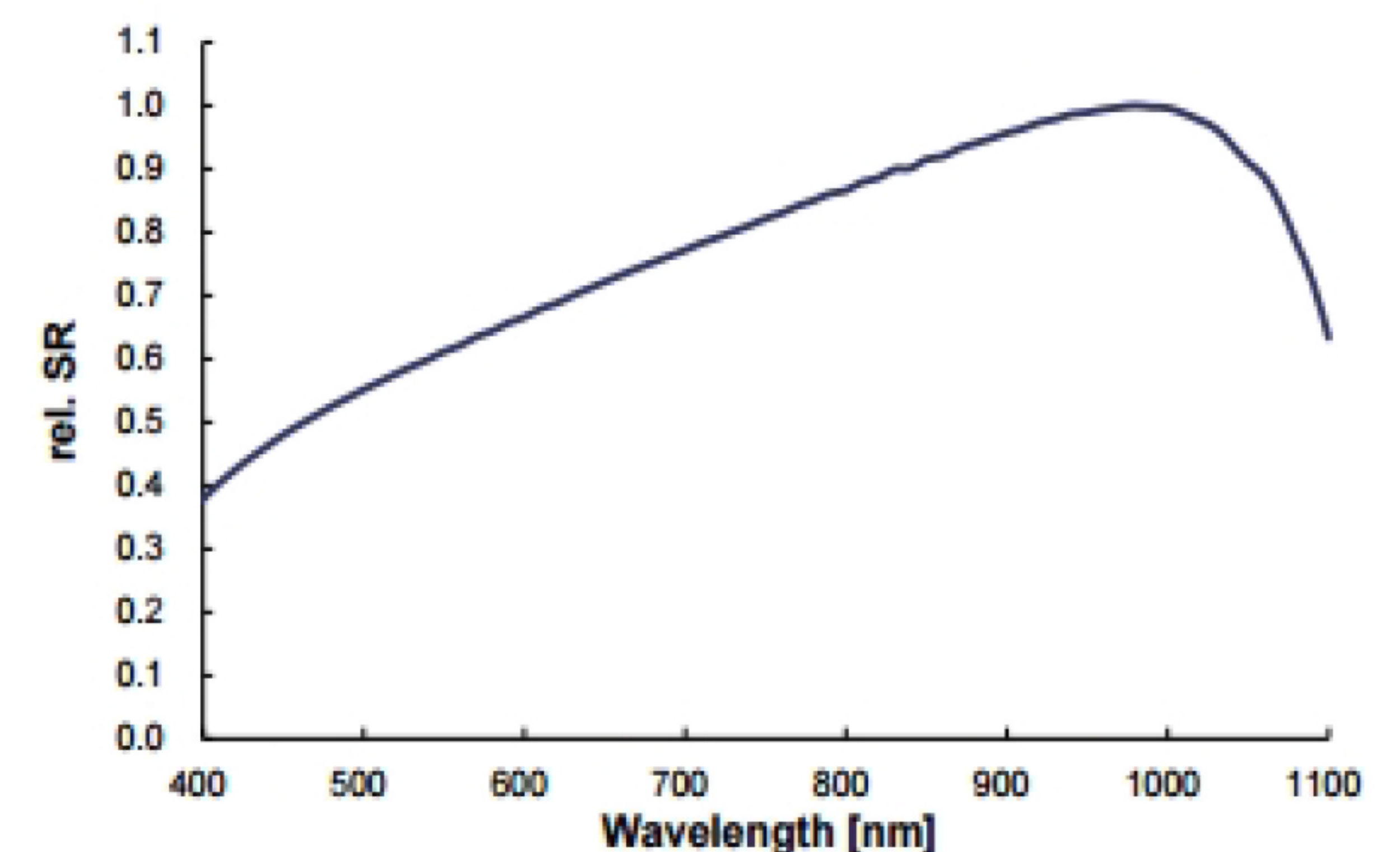
### Light Intensity Dependence

Intensity(W/m <sup>2</sup> )	Uoc	Isc
1000	1	1
900	0.996	0.903
800	0.991	0.803
600	0.988	0.602
400	0.962	0.403

### Product Appearance



### Front Spectral Response(QE)



## DM Solar Cell

### Electrical Characteristics

NO.	Efficiency Range (%)	Rated Power (Wp)	*Maximum Power Voltage (V)	*Maximum Power Current (A)	*Open Circuit Voltage (V)	*Short Circuit Current (A)
DM-P-210M-237	23.70%	10.451	0.601	17.400	0.696	18.210
DM-P-210M-236	23.60%	10.407	0.600	17.347	0.694	18.178
DM-P-210M-235	23.50%	10.363	0.598	17.320	0.694	18.162
DM-P-210M-234	23.40%	10.318	0.597	17.276	0.693	18.135
DM-P-210M-233	23.30%	10.274	0.595	17.266	0.691	18.135
DM-P-210M-232	23.20%	10.230	0.593	17.247	0.690	18.121
DM-P-210M-231	23.10%	10.186	0.592	17.201	0.689	18.111
DM-P-210M-230	23.00%	10.143	0.592	17.136	0.688	18.106

Test condition : 1000 W / m<sup>2</sup>, AM 1.5, 25°C

Technical parameters above-mentioned subjects to technical changes and tests. DUOMAX Solar reserves the right of final interpretation

### BACK EFFICIENCY DISTRIBUTION

NO.	Range of EFF. (%)	Rated Power (Wp)	*Maximum Power Voltage (V)	*Maximum Power Current (A)	*Open Circuit Voltage (V)	*Short Circuit Current (A)
DM-P-210M-175	>17.50%	7.77	0.584	13.307	0.676	14.248
DM-P-210M-170	17.00%-17.50%	7.50	0.572	13.105	0.674	13.899
DM-P-210M-165	16.50%-17.00%	7.26	0.579	12.535	0.672	13.552
DM-P-210M-160	16.00%-16.50%	7.06	0.576	12.248	0.670	13.201

Test condition : 1000 W / m<sup>2</sup>, AM 1.5, 25°C

Technical parameters above-mentioned subjects to technical changes and tests. DUOMAX Solar reserves the right of final interpretation

### FRONT IV CURVE

