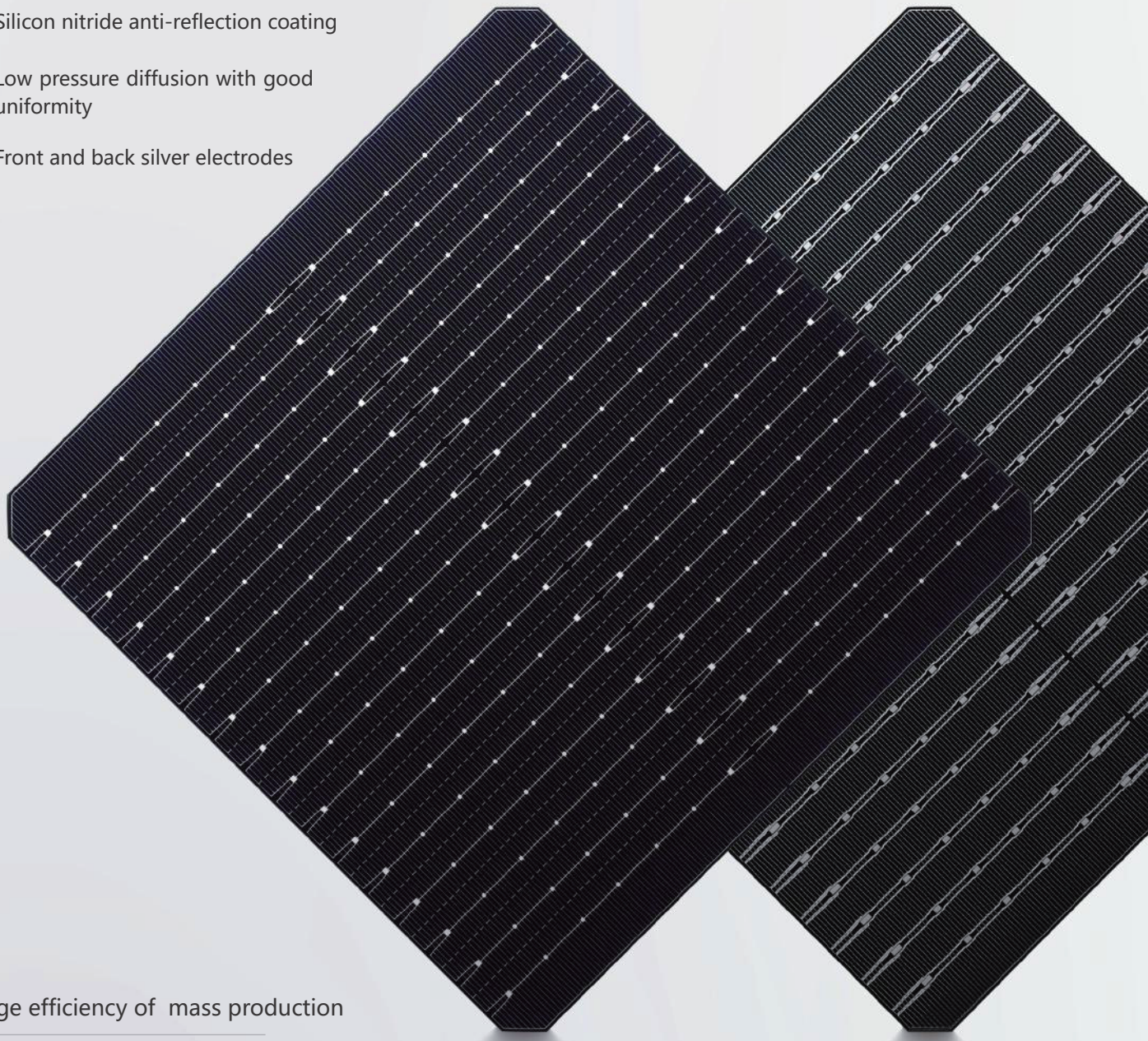
CQ SOLAR®

Y182MTP

182 Monocrystalline Bifacial Solar Cell

- Ultra-Efficient solar cells with an anisotropically etched surface
- Silicon nitride anti-reflection coating
- Low pressure diffusion with good uniformity
- Front and back silver electrodes



Average efficiency of mass production

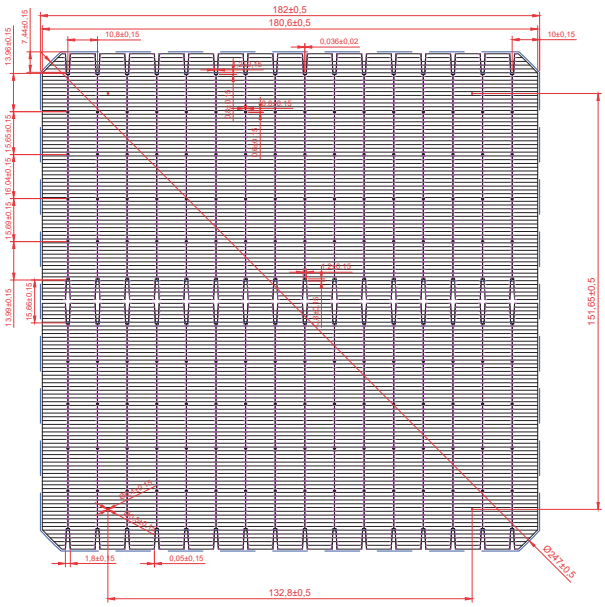
Electrical Performance

Grade	Unit	24.80	24.70	24.60	24.50	24.40	24.30	24.20	24.10	24.00
Voc	V	0.712	0.711	0.711	0.711	0.710	0.710	0.710	0.709	0.708
Isc	A	13.907	13.905	13.903	13.902	13.899	13.899	13.898	13.897	13.896
Vmpp	V	0.608	0.606	0.605	0.603	0.601	0.600	0.598	0.596	0.595
Impp	A	13.469	13.450	13.431	13.415	13.395	13.376	13.363	13.350	13.328
Pmpp	W	8.19	8.15	8.12	8.09	8.05	8.02	7.99	7.95	7.93
Efficiency	%	24.8	24.7	24.6	24.5	24.4	24.3	24.2	24.1	24.0

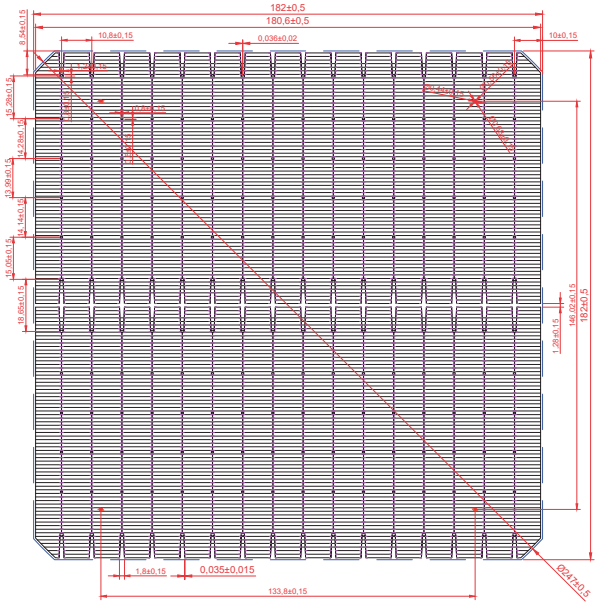
Standard Test Conditions: 1000W/m2, AM1.5,25 °C

Product Appearance

Front



Back



Temperature Coefficient

TkPower	-(0.39±0.02) %/k
TkVoltage	-(0.33±0.03) %/k
TkCurrent	+(0.06±0.015) %/k

Physical Charaacteristics

Substrate material	N-type mono-crystalline silicon wafer-TOPCon
Cell thickness	140μm±14μm
Dimension	182mm*182mm±0.5mm
Diagonal	247mm±0.5mm
Front(-)	16*0.036mm±0.02mm bus bars(silver)132 lines, Silicon oxide + bule silicon nitride compound anti-reflection coating(PID Free)
Back(+)	16*0.036mm±0.02mm bus bars(silver)142 lines, Blue silicon nitride compound anti-refiection coating

Light induced degradation test

Using Xenon lamp (Irradiance of 1000W/m2,with spectrum AM 1.5)to irradiate test cells, after a total irradiation of 5 kwh/m2 ,the degradation of maximum output power of cells is ≤2%

CTM

Lower cell to module(CTM) power loss:<3%

Anti-PID

Potential Induced Degradation(-1500V,192h):<5%

Packaging, Storage

Solar cells are closely packed with soft sponge around and heat shrink is used around the box unit. Outer packing box must have shock buffer, to be suitable for long-distance delivery.
After packaging, cells should be stored indoors in the conditions of good ventilation, dry, humidity below 60%, and temperature ≤40 °C . Cells should be sampling inspected again if the storage time over 45 days