

Black22 Series

Features Performance and Quality

- Industry-Leading efficiency of P-type mono-crystalline silicon solar cell
- Robust reliability performance for potential module benefit beyond 25 years
- Compatible with present mainstream module manufacturing process
- Standard cells calibrated by Fraunhofer ISE
- 100% in-line optical and electrical inspection

NSEY 182mm Monocrystalline Silicon Solar Cell (PID FREE) Pattern Code 10BB-27B34

PHYSICAL CHARACTERISTICS

Dimensions 182.00mm × 182.00mm ± 0.5mm Φ247mm±0.5mm

Thickness 175μm ±17.5μm

Front 10 Bus-bars (Pad) width 1.2mm ± 0.3mm

Back 10 Bus-bars (Pad) width 1.5 ± 0.3mm

Distance between bus-bars: 17.3 mm ± 0.15mm

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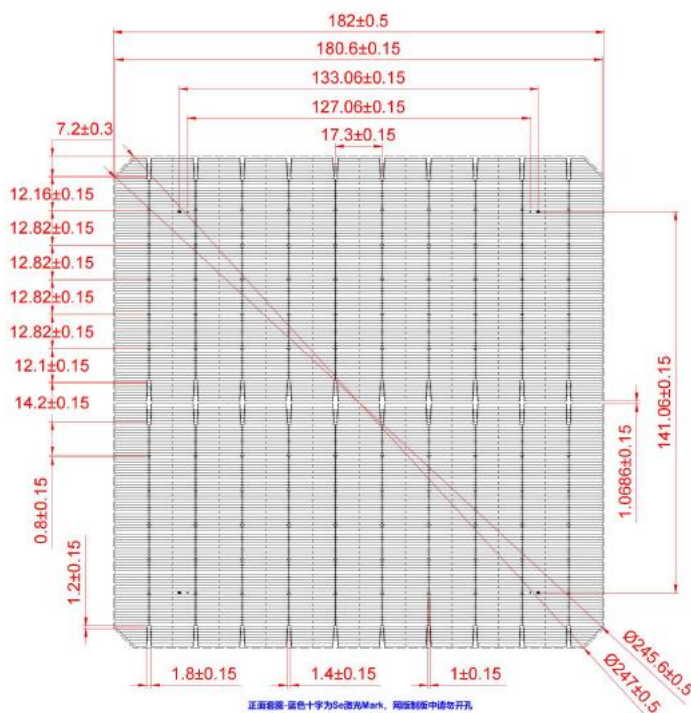
ELECTRICAL CHARACTERISTICS

Code	23.5	23.4	23.3	23.2	23.1	23.0	22.9	22.8	22.7	22.6	22.5	22.4	22.1	22.0
Pmpp (W)	7.758	7.725	7.692	7.659	7.626	7.593	7.560	7.527	7.494	7.461	7.428	7.395	7.296	7.263
Umpp (V)	0.593	0.592	0.591	0.590	0.589	0.588	0.587	0.586	0.585	0.584	0.583	0.582	0.579	0.578
Impp (A)	13.086	13.057	13.012	12.983	12.954	12.908	12.879	12.850	12.803	12.774	12.744	12.715	12.608	12.561
Voc (V)	0.692	0.691	0.690	0.689	0.688	0.687	0.686	0.685	0.684	0.683	0.682	0.681	0.678	0.677
Isc (A)	13.776	13.762	13.730	13.713	13.686	13.639	13.601	13.635	13.575	13.564	13.554	13.541	13.527	13.495

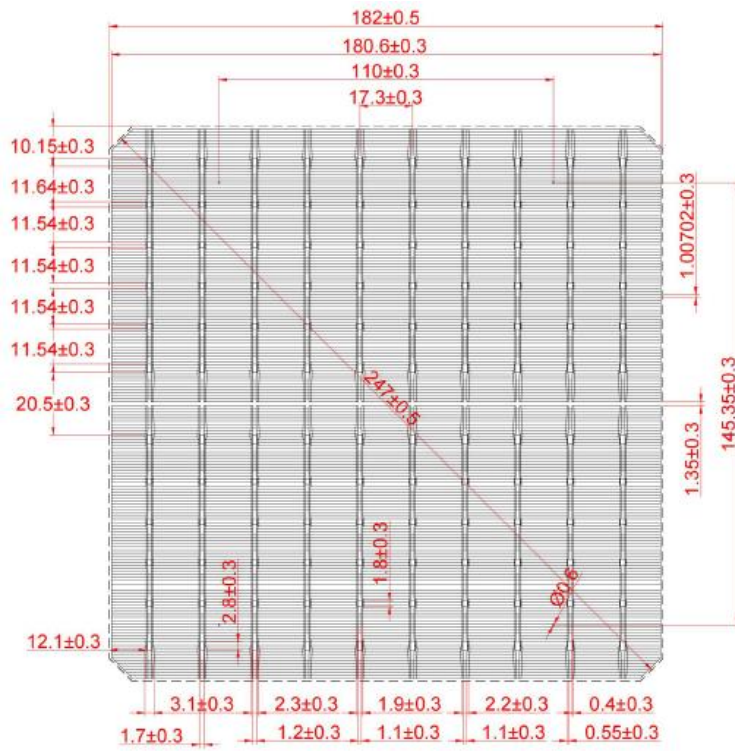
Temperature coefficients TkCurrent : 0.07%/K, TkVoltage : -0.36%/K, TkPower : -0.36%/K

The above data are average figures presently measured. Accuracy of eff. measurement is ±0.1%.
Reference data are calibrated by Fraunhofer ISE Freiburg.

APPEARANCE_ FRONT SIDE



APPEARANCE_BACK SIDE



IV-Curve

