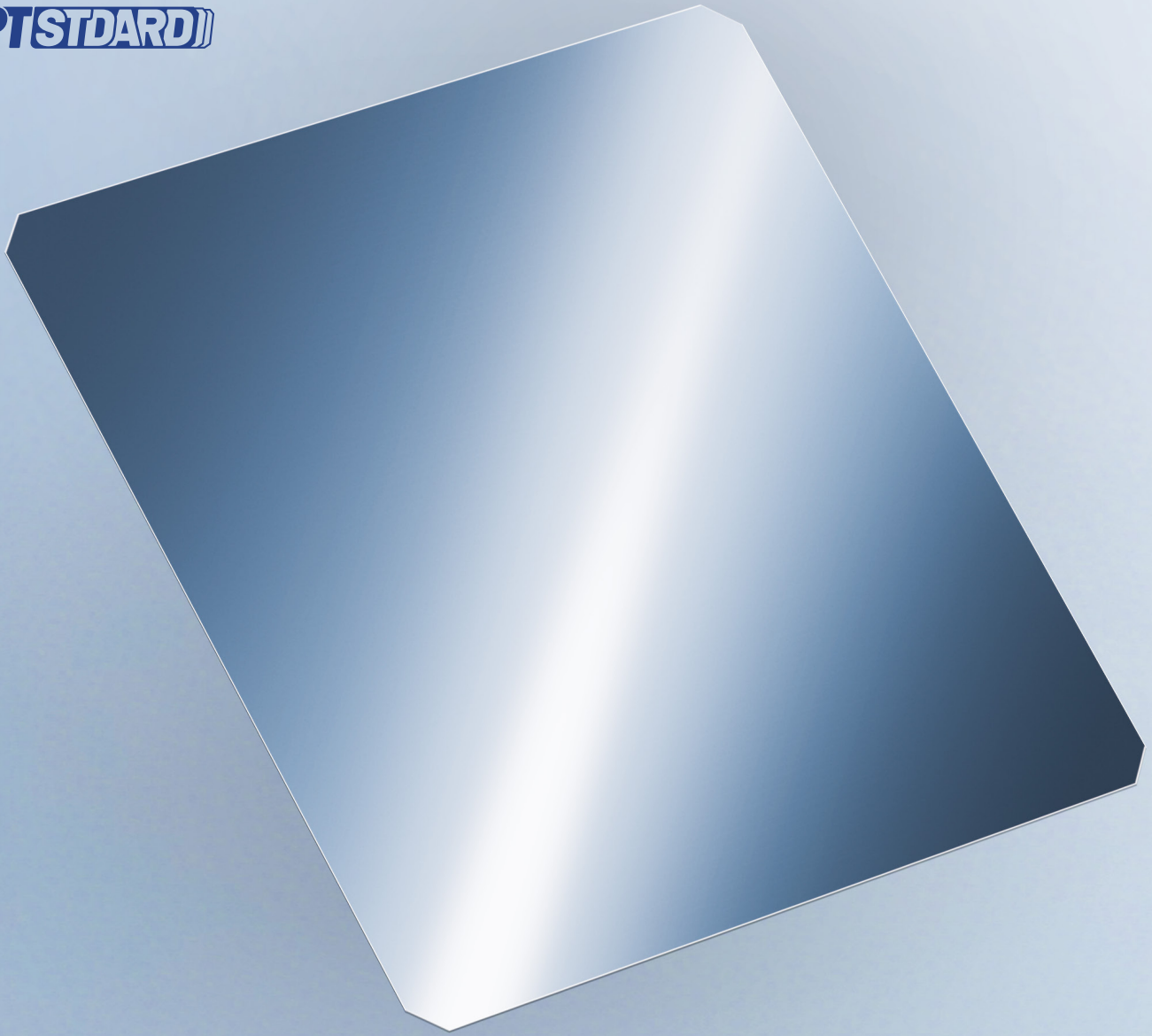


PTSTANDARD



Mono Silicon Wafer

Data Sheet

N-Type 182±0.25mm

PT.Standard Energy Indonesia

Email info@standard-thailand.com

Web www.ptstandard-energy.com

Mono Silicon Wafer

Data Sheet

N-Type 182±0.25mm

Material Performance Parameters

Conductivity Type	N	P/N type tester
Doped element	Phosphorus	/
Crystallinity	Single crystal	Priority etching technology (FSTM F47-88)
Dislocation density/pcs/cm ²	≤500	Priority etching technology (FSTM F47-88)
Surface orientation	<100>±3°	X-ray diffractometer
Lateral crystal orientation	<010>, <001>±3°	X-ray diffractometer
Oxygen content (ppma)	≤11	FTIR (ASTM F121-83)
Carbon content (ppma)	≤1	FTIR (ASTM F123-91)
Lifetime (μs)	≥1000	BCT-400
Resistivity (Ω.cm)	0.6-1.6	Silicon wafer automatic inspection equipment

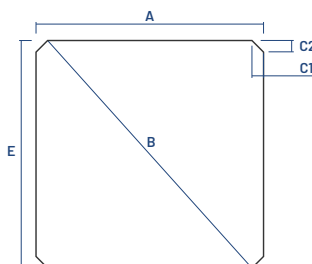
Geometric Rule Parameters

Chamfered edge shape	Round	/
Wafer margins (mm)	182±0.25mm	Silicon wafer automatic inspection equipment
Wafer diameter (mm)	φ247±0.25mm	Silicon wafer automatic inspection equipment
Arc length projection (mm)	7.51±0.5mm	Silicon wafer automatic inspection equipment
Perpendicularity	90±0.15°	Silicon wafer automatic inspection equipment
Thickness specification (μm)	130±10 / 140±10	Silicon wafer automatic inspection equipment
	135±10 / 145±10	Silicon wafer automatic inspection equipment

Appearance Quality

Surface quality	No visible pollution No color difference, No bright lines	Silicon wafer automatic inspection equipment
Edge Chipping	Depth≤0.3mm , Length ≤0.5mm Count ≤ 2/pcs, no V-shaped	Silicon wafer automatic inspection equipment
Saw mark (μm)	≤15	Silicon wafer automatic inspection equipment
Warping/bending degree (μm)	≤40	Silicon wafer automatic inspection equipment
TTV (μm)	≤25	Silicon wafer automatic inspection equipment
Micro-crack/void	None	Silicon wafer automatic inspection equipment

Wafer dimensions



Size: 182±0.25mm

A: 182±0.25mm

E: 182±0.25mm

B: φ 247±0.25mm

C1: 7.51±0.5mm

C2: 7.51±0.5mm