Mono Silicon Wafer
Data Sheet

N-Type 182.2*183.75±0.25mm

Material Performance Parameters

Conductivity Type	N	P/N testing machine
Dopant	Phosphorus	/
Crystallinity	Single crystal	Preferential etch techniques (ASTM F47-88)
Etch pit density (dislocation density)	≤500cm^2	Preferential etch techniques (ASTM F47-88)
Surface orientation	<100>±3°	X-ray diffraction
Side orientation	<010>, <001>±3°	X-ray diffraction
Oxygen contents (ppma)	≤11	FTIR (ASTM F121-83)
Carbon contents (ppma)	≤1	FTIR (ASTM F123-91)
Lifetime (μs)	≥1000	BCT-400
Resistivity (Ω.cm)	0.6-1.6	Silicon wafer automatic inspection equipment

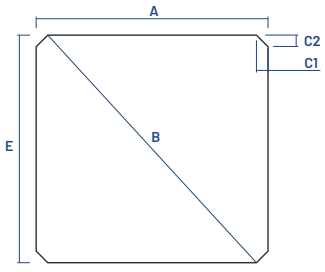
Geometric Rule Parameters

Geometry	Quasi square	/
Chamfered edge shape	Round	/
Wafer margins (mm)	Short edge: 182.2±0.25	Silicon wafer automatic inspection equipment
	Long edge:183.75±0.25	Silicon wafer automatic inspection equipment
Wafer diameter (mm)	ϕ247 ±0.25mm	Silicon wafer automatic inspection equipment
Arc length projection (mm)	8.57/8.49 ±0.5mm	Silicon wafer automatic inspection equipment
Perpendicularity	90±0.15°	Silicon wafer automatic inspection equipment
Thickness specification (μm)	130/135±10	Silicon wafer automatic inspection equipment

Appearance Quality

Surface quality	No visible pollution	Silicon wafer automatic inspection equipment
	No color difference, No bright lines	
Edge Chipping	Depth≤0.3mm , Length ≤0.5mm	Silicon wafer automatic inspection equipment
	Count ≤ 1/pcs, no V-shaped	
Saw mark (μm)	≤15	Silicon wafer automatic inspection equipment
Warpage/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: 182.2*183.75±0.25mm

A: 182.2±0.25mm

E: 183.75±0.25mm

B: ϕ247±0.25mm

C1: 8.56±0.5mm

C2: 8.49±0.5mm