PTSTDARD

Mono Silicon Wafer

Data Sheet

P-Type 182.2*183.75±0.25mm

PT.Standard Energy Indonesia

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Material Performance Parameters

Conductivity Type	P	P/N type tester
Doped element	Gallium	/
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)	≤16	FTIR (ASTM F121-83)
Carbon content (ppma)	≤1	FTIR (ASTM F123-91)
Lifetime (μs)	≥70	BCT-400
Resistivity (Ω.cm)	0.4-1.1	Silicon wafer automatic inspection equipment

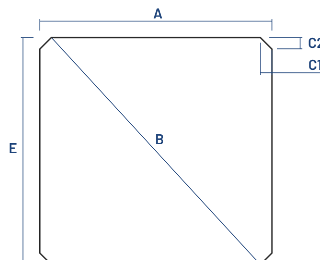
Geometric Rule Parameters

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 ≤ 2/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： ϕ 247±0.25mm

C1： 8.57±0.5mm

C2： 8.49±0.5mm