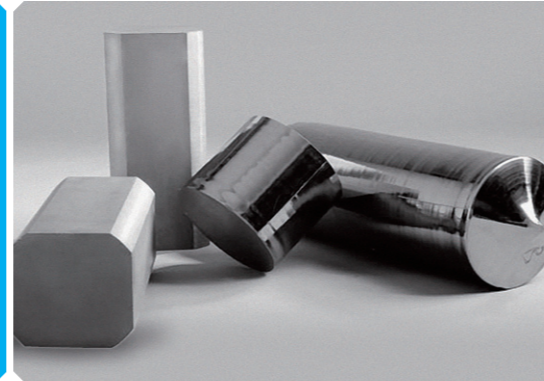


N type Monocrystalline Wafers



Technical parameters of monocrystalline wafers

Items	Parameters	Remarks
Growth method	CZ	
Orientation	<100>±2° Including orientation on surface and edge	
Dopant	P	
Conductive type	N type silicon	
Content of oxygen and carbon	[Oi] ≤1×10 ¹⁸ atoms/cm ³ [Cs] ≤5×10 ¹⁷ atoms/cm ³	
Minority carrier lifetime	< 3 us as-cut wafer	
Resistivity	2–12 Ω·cm	Or as required by customers

N type Monocrystalline Wafers

Technical specification and parameters of monocrystalline wafers

Items	Parameters	
Dimension	156±0.25mm 156.75±0.25mm 160±0.25mm	
Diameter	200±0.5mm 205/210/215±0.25mm 210±0.25mm	
Chamfer	Deviation of chamfer < 0.6mm	
Thickness	200±20μm Average thickness of single wafer ≥185μm	
TTV	≤25μm	
Saw mark	One-way cutting	Single saw mark ≤15μm Distance from saw mark to edge > 5mm Proportion of the area of saw mark to total area of wafers < 10%
	Two-way cutting	≤10μm
Verticality	90±2°	
Warpage	< 50μm	
Bow	< 50μm	
Surface contamination	After rinsing with cleaning fluid, no visible contamination by naked eyes	
Side contamination	No obvious black adhesive traces	
Burrs	Not obvious by observation on single wafer	
Falloff of silicon crystals	Number ≤1 pc; reduction in wafer thickness ≤20% At fillet corners, depth ≤0.3mm, length ≤0.3mm Four edges, depth ≤0.3mm, length ≤0.5mm	
Chips		
Step wafers		
Holes	None	
Cracks		
Side warpage		