

Silicon Wafer

125×125 MONO-CRYSTAL SILICON WAFER SPECIFICATION

Parameter	Value	Unit
Material type	CZ Mono-crystalline Silicon	
Geometry	Pseudo square wafer	
Wafer orientation	(1-0-0) ±2	Degree
Conductivity type	P-type	
Diameter	150±0.5, 165±0.5	mm
Dimension	125×125±0.5	mm
Dopant	B	
Resistivity	0.5-3.0	Ω-cm
Oxygen content	≤1E ¹⁸	atom/cm ³
Carbon content	≤5E ¹⁶	atom/cm ³
Lifetime	≥10	μs
Square angle	90±0.5	degree
Thickness	200±20	μm
TTV	≤25	μm
Bow/Warp	≤50	μm
Surface	As-cut, cleaned	
Surface damage	Saw mark ≤15	μm
Surface quality	No crack, no obvious saw mark, no obvious tactility, no abnormal spot, no stain	
Edge defect	Depth ≤0.5mm, no sharp edge	

156×156 MULTI-CRYSTAL SILICON WAFER SPECIFICATION

Parameter	Value	Unit
Material type	Multi-crystalline Silicon/Casting	
Geometry	Square wafer	
Conductivity type	P-type	
Dimension	156×156±0.5	mm
Corner	2.0±0.5	mm
Dopant	B	
Resistivity	0.5-3.0	Ω-cm
Oxygen content	≤8E ¹⁷	atom/cm ³
Carbon content	≤9E ¹⁷	atom/cm ³
Lifetime	≥2	μs
Square angle	90±0.5	degree
Thickness	200±20	μm
TTV	≤30	μm
Bow/Warp	≤75	μm
Surface	As-cut, cleaned	
Surface damage	Saw mark ≤15	μm
Surface quality	No crack, no obvious saw mark, no obvious tactility, no abnormal spot, no stain	
Grain boundary direction	Vertical to wafer surface	
Edge defect	Depth ≤0.5mm, no sharp edge	