

150mm High Purity Semi-Insulating 4H SiC Substrate

Parameter	Unit	Specification Value		Remark
Grade		Production Grade	Dummy Grade	
Diameter	mm	150.0 ± 0.25		
Thickness	μm	500.0 ± 25.0		
Surface Orientation		{0001} ± 0.2°		
Primary Flat		Notch		
Micropipe Density	cm ²	≤ 0.5	≤ 5	
Resistivity	Ω·cm	≥ 1E+9	≥ 1E+5	
TTV	μm	≤ 6	≤ 10	
Bow (Absolute Value)	μm	≤ 15	≤ 30	
Warp	μm	≤ 30	≤ 45	
LTV (max, 5mm*5mm)	μm	≤ 2	NA	
Surface Finish		Double side polish, Si epi-face CMP, C face optical polish		
Surface Roughness	nm	CMP Si Face Ra ≤ 0.15		
Polytype Area by polarized light		None permitted	Cumulative area < 30%	
Cracks by high-intensity light		None permitted		
Scratches by high-intensity light		None permitted		
Edge chips		None permitted	Qty. 2 ≤ 1.0 mm width and depth	
Area Contamination by high-intensity light		None permitted		
Packaging		Multi-wafer Cassette or Single Wafer Container		