

4inch Optical SiC Substrate

GZSC 100mm Optical Sic Substrate Specification				
Parameter	Unit	Specification Value		Remark
Grade		Production Grade	Dummy Grade	
Diameter	mm	100.0 mm±0.25 mm		
Thickness	μm	500.0 μm ±25.0 μm		
Primary Flat Length	mm	32.5±2.0		
Secondary Flat Orientation		90.0° CW from Primary ± 5.0°, silicon face up.		
Secondary Flat Length		18.0 mm ± 2.0 mm		
Micropipe Density	cm ²	≤ 0.1	≤ 5	
TTV	μm	≤ 2	≤ 10	
Bow (absolute value)	μm	≤ 10	≤ 15	
Warp	μm	≤ 15	≤ 20	
LTV (max, 10mm×10mm)	μm	≤ 2	≤ 4	
Surface Finish		Double side polish, Si epi-face CMP, C face CMP		
Surface Roughness	nm	Si Face Ra≤ 0.3 nm and C Face Ra≤ 0.3 nm	Si Face Ra≤ 0.5 nm and C Face Ra≤ 0.5 nm	
Edge Chips (No EE)		None permitted	None greater than 0.5 mm depth.	
Laser marking		As per SEMI Standard		
Polytype Area by polarized light		None	Cumulative area < 30%	
Hex Plates by high-intensity light		None	Cumulative area < 5%	
Cracks by high-intensity light		None permitted		
Scratches by high-intensity light		None	NA	
Area Contamination by high-intensity light		None	NA	
Packaging		Multi-wafer cassette or Single Wafer Container Inner packing: vacuum, outer packing: no damage, no air leakage		