

SUBSTRATE PROPERTY	MGSiC4NNA	MGSiC4NNB	MGSiC4NNC
Grade	A	B	C
Diameter	100.0 mm + 0.0/-0.5 mm		
Surface Orientation	on-axis: {0001} ±0.2°		
Primary Flat Orientation	<11-20> ± 5.0°		
Secondary Flat Orientation	90.0° CW from Primary ± 5.0°, silicon face up		
Primary Flat Length	32.5 mm ±2.0 mm		
Secondary Flat Length	18.0 mm ±2.0 mm		
Wafer Edge	Chamfer		
Carrier Type	n-type		
Dopant	N-doped		
Micropipe Density	≤1 micropipes/ cm ²	≤5 micropipes/ cm ²	≤30 micropipes/ cm ²
Polytype	4H		
Resistivity	0.015 Ω·cm ~ 0.028 Ω·cm		
Thickness	350.0 μm ± 25.0 μm or 500.0 μm ± 25.0 μm		
TTV	≤10 μm		≤15 μm
Bow (absolute value)	≤25 μm		≤30 μm
Warp	≤45 μm		
Surface Finish	Double Side Polish, Si Face CMP (chemical polishing)		
Surface Roughness	CMP Si Face Ra≤0.5 nm		N/A
Cracks by high-intensity light	None permitted		
Edge chips/indent by diffuse lighting	None permitted	Qty.2 < 1.0 mm width and depth	Qty.2 < 1.0 mm width and depth
Total usable area	≥90%	≥80%	N/A

*The other specifications can be customized according to customer's requirements