MG Semiconductor materials

SUBSTRATE PROPERTY	MGSiC4SIUA	MGSiC4SIUB	MGSiC4SIUC
Grade	A	B	C
Diameter	100.0 mm + 0.0/-0.5 mm		
Surface Orientation	{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	Semi-insulating		
Dopant	V doped or undoped		
Micropipe Density	≤1 micropipes/ cm^2	≤5 micropipes/ cm^2	≤30 micropipes/ cm^2
Polytype	4H		
Resistivity	>1E7Ω·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/indents 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

Tel: +7 (800) 333-06-05
Email: sales@macrogroup.ru