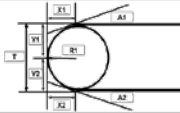


8inch N-Type SiC Substrate

Parameter	Unit	Specification Value			Remark
Grade		Production Grade for MOS	Production Grade for SBD	Dummy Grade	
Diameter	mm	200.00±0.25			
Thickness	μm	350 ± 25			
Dopant		Nitrogen			
Surface Orientation		4 °toward<11-20>± 0.25°		4 °toward<11-20>± 0.5°	
Orientation Notch Depth	mm	1-1.25			
Notch Orientation		Along [1-100] ± 2°			
Orthogonal misorientation		± 2°	± 5°		
Edge profile		 Angle A1/A2(°): 25±5 (Thickness: 350±25μm) Length X1/X2(μm): 180±60			
Micropipe Density	cm²	≤ 0.1	≤ 0.1	≤ 5	
EPD	cm²	≤ 3000	≤ 5000	NA	
BPD	cm²	≤ 400	≤ 1000	NA	
TED	cm²	≤ 2500	≤ 4000	NA	
TSD	cm²	≤ 50	≤ 50	NA	
Resistivity (ave)	Ω·cm	0.015-0.025		0.014-0.028	
TTV	μm	≤ 5	≤ 5	≤ 10	
Bow (absolute value)	μm	≤ 15	≤ 25	≤ 35	
Warp	μm	≤ 20	≤ 35	≤ 45	
LTV (max, 10mm×10mm)	μm	≤ 2	≤ 2	NA	
Surface Finish		Double side polish, Si epi-face CMP, C face optical polish			
Surface Metal Contamination	cm²	≤ 5E+10 atoms/cm²		≤ 1E+11 atoms/cm²	(Na, Mg, Al, K, Ca, Ti, Cr, Mn, Fe, Co, Ni, Cu, Zn, Hg)
Surface Roughness	nm	CMP Si Face Ra ≤ 0.12 nm			
Edge Chips		None permitted		Edge Chips of 0.5mm or less is allowed	
Laser marking		Backside			
Polytype Area by polarized light		None permitted		Cumulative area<30%	
Carbon Inclusion	%	≤ 0.1	≤ 0.2	NA	
Cracks by high-intensity light		None permitted			
Scratches by high-intensity light		None permitted			
Area Contamination by high-intensity light		None permitted			
Packaging		Multi-wafer cassette or Single Wafer Container Inner packing: vacuum, outer packing: no damage, no air leakage			

✉ os_inquiry@ostech.co.jp

🏠 <http://www.ostech.co.jp>

OSTECH



5-2-27, Minami-mikunigaoka, Sakai-ku, Sakai, Osaka, JAPAN 590-0023
TEL : +81-72-221-2778 FAX : +81-72-221-2779