

SILICON CARBIDE (SiC) SUBSTRATE SPECIFICATION
100mm DIAMETER, 4H POLYTYPE, n-type
Prime Grade

Property	Value	Tolerance	Units
Diameter	100.0	± 0.5	mm
Edge Exclusion	3		mm
Center Thickness	350	± 25	µm
Polytype	4H	> 95% of area	
Micropipe Density	< 1		cm ⁻²
Face Orientation	4.0° from secondary flat <11-20>	± 0.5	deg
Front Surface (Si-face) Finish	EpiReady™		
Scratches by Bright Light	Cumulative Length < 10 cm		
Back Surface (C-face) Finish	Optical Polish (standard)		
Warp	< 40		µm
Bow	< 25		µm
TTV	< 15		µm
Flat Length: Primary	32.5	±2	mm
Flat Length: Secondary	18.0	±2	mm
Flat Orientation: Primary	Perpendicular to (11-20) plane	± 1	deg
Flat Orientation: Secondary	90° CW from primary flat	± 5	deg
Laser Mark Location & Text	Carbon Face Per SEMI M55		
Edge	Rounded, as per SEMI specs		
Packaging	Single wafer coin-style container or Multi-wafer Cassette		
Cracks	None		
Cumulative Area Defects	< 10% Area		
Dopant	n-type Nitrogen (0.015 to 0.028)	±0.002	Ohm-cm

^[1] EpiReady™ CMP polish is suitable for GaN or SiC epitaxial growth