



Crystal Properties			
PARAMETER	UNITS	SPECIFICATION	NOTE
Crystalline structure	-	Monocrystalline	
Growth technique	-	Czochralski (Cz)	
Orientation	-	<100> ±1°	
Slice orientation	Degrees	ON ±1.0°	
Electrical Properties			
PARAMETER	UNITS	SPECIFICATION	NOTE
Conductance type	-	N-type	
Dopant	-	Phosphorus	
Resistivity	Ω-cm	1 - 20	
Geometrical Properties			
PARAMETER	UNITS	SPECIFICATION	NOTE
Diameter	mm	150±0.2	
Thickness	μm	675±25	
TTV	μm	≤10	
Warp	μm	≤40	
Bow	μm	≤40	
Flats	-	1 per SEMI Standard	
Primary flat length	mm	57.5±2.5	
Primary flat orientation	-	<110> ±1°	
Surface Appearance			
PARAMETER	UNITS	SPECIFICATION	NOTE
Front surface	-	Polished	
Back surface	-	Etched	
Frontside particles ≥0.20 μm (LPD)	No./wafer	≤10	
Nominal edge exclusion	mm	3.0	
Wafer Identification			
PARAMETER	UNITS	SPECIFICATION	NOTE
Lasermark	-	None	
Surface Metals			
APPLICABLE METALS	UNITS	SPECIFICATION	NOTE
Al, Ca, Cl, Cr, Cu, Fe, K, Na, Ni, Zn	Atoms/cm ²	≤5E10	