



Crystal Properties			
PARAMETER	UNITS	SPECIFICATION	NOTE
Crystalline structure	-	Monocrystalline	
Growth technique	-	Czochralski (Cz)	
Orientation	-	$\langle 100 \rangle \pm 1^\circ$	
Slice orientation	Degrees	$0N \pm 1.0^\circ$	
Electrical Properties			
PARAMETER	UNITS	SPECIFICATION	NOTE
Conductance type	-	P-type	
Dopant	-	Boron	
Resistivity	$\Omega$ -cm	10 - 20	
Geometrical Properties			
PARAMETER	UNITS	SPECIFICATION	NOTE
Diameter	mm	$100 \pm 0.50$	
Thickness	$\mu$ m	$525 \pm 25$	
TTV	$\mu$ m	$\leq 5$	
Warp	$\mu$ m	$\leq 30$	
Bow	$\mu$ m	$\leq 30$	
Flats	-	2 per SEMI Standard	
Primary flat length	mm	$32.50 \pm 2.50$	
Primary flat orientation	-	$\langle 110 \rangle \pm 1^\circ$	
Secondary flat location	-	$90^\circ \pm 5^\circ$ from primary flat	
Secondary flat length	mm	$18.00 \text{ mm} \pm 2.00 \text{ mm}$	
Surface Appearance			
PARAMETER	UNITS	SPECIFICATION	NOTE
Front surface	-	Polished	
Back surface	-	Polished	
Frontside particles $\geq 0.30 \mu$ m (LPD)	No./wafer	$\leq 20$	
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 <sup>2</sup>	$\leq 5E10$	