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N-M10-C
Monocrystalline Wafer

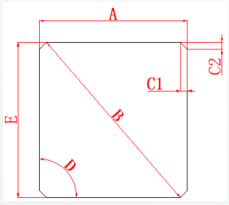
Comprehensive system certification

ISO 9001:2015

ISO 14001:2015

OHSAS 18001:2018

Schematic diagram of wafer size



Size：M10-C
A：182.2±0.25mm
E：183.75±0.25mm
B：φ247±0.25mm
C1：8.57±0.5mm
C2：8.49±0.5mm
D：90±0.15°

Monocrystalline Wafer Specification

N-type M10-C

Key parameters

Conductivity type	N-type	P/N type tester(DLY-2 P/N)
Dopant	Phos.	--
Resistivity/Ω.cm	0.4-1.6	Wafer inspection system
MCLT(Minority carrier lifetime)/μs	⩾1000	Transient with injection level:5E14cm^{-3} (Sinton BCT-400)
Oxygen concentration [Oi]/at/cm^3	⩽6.0×10^{17}	FTIR(ASTM F121-83)
Carbon Concentration [Cs]/at/cm^3	⩽5.0×10^{16}	FTIR(GB/T 1558-2009)

Material properties

Growth method	CZ	--
Crystallinity	Monocrystalline	--
Etch pit density (dislocation density)/pcs/cm^2	⩽500	Preferential Etch Techniques(ASTM F47-88)
Surface orientation/°	＜100＞±3	X-ray Diffraction Method (ASTM F26-1987)
Orientation of pseudo square sides/°	＜010＞, ＜001＞±3	X-ray Diffraction Method (ASTM F26-1987)

Geometric dimensions and surface properties

Wafer model	M10-C	--
Geometry	Pseudo square	--
Bevel edge shape	Round	--
Wafer Side length/mm	Short side 182.2±0.25; Long side 183.75±0.25	Wafer inspection system
Wafer Diameter/mm	ϕ247±0.25	Wafer inspection system
Arc length projection/mm	C1：8.57±0.5；C2：8.49±0.5	Wafer inspection system
Angle between adjacent sides/°	90±0.15	Wafer inspection system
Thickness/μm	130±8	Wafer inspection system
Batch mean/μm	⩾130	Wafer inspection system
Total thickness variation/μm	⩽20	Wafer inspection system
Saw marks/μm	⩽13	Wafer inspection system
Bow/μm	⩽40	Wafer inspection system
Warp/μm	⩽40	Wafer inspection system
Cutting method		--
Surface quality	as cut and cleaned, no visible contamination，color difference (as determined by standard sample) (oil or grease, finger prints, spot stains, epoxy/glue residue are not allowed)	Wafer inspection system
Chip	depth⩽0.3mm & length⩽0.5mm,Max 1/pcs, no V-chip	Naked eyes or wafer inspection system
Micro cracks / holes	Not allowed	Wafer inspection system