

P-type-G12 (210×210*295) A

Monocrystalline Wafer



Comprehensive system certification

ISO9001:2022

ISO14001:2022

ISO45001:2022

Gokin

Monocrystalline Wafer Specification

Key parameters

The file version 202406

Conductivity type	P-type	PN testing machine
Dopant	Gallium(稼)	/
Resistivity/ Ω -cm	0.4-1.1	Wafer inspection system
Lifetime/ μ s	≥ 70	BCT-400
Oxygen concentration/ppma	≤ 16	FTIR (ASTM F121-83)
Carbon Concentration /ppma	≤ 1	FTIR (ASTM F123-91)

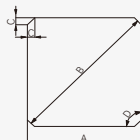
Material properties

Growth method	CZ	/
Crystallinity	Monocrystalline	/
Etch pit density (dislocation density)/pcs/cm ²	≤ 500	Preferential Etch Techniques(ASTM F47-88)
Surface orientation/ $^{\circ}$	$\langle 100 \rangle \pm 3$	X-ray Diffraction Method
Orientation of pseudo square sides/ $^{\circ}$	$\langle 010 \rangle, \langle 001 \rangle \pm 3$	X-ray Diffraction Method

Geometric dimensions and surface properties

Wafer model	M10	/
Geometry	Quasi square	/
Bevel edge shape	Round	/
Wafer Side length/mm	210/210 \pm 0.25	AOI
Wafer Diameter/mm	295 \pm 0.25	AOI
Arc length projection/mm	1.41 \pm 0.5	AOI
Angle between adjacent sides/ $^{\circ}$	90 \pm 0.15	AOI
Thickness/ μ m	140/150/155 \pm 10	AOI
Batch mean/ μ m	$\geq 140/150/155$	AOI
TTV/ μ m	≤ 25	AOI
Saw Mark/ μ m	≤ 15	AOI
Bow/ μ m	≤ 40	AOI
Warpage/ μ m	≤ 40	AOI
Cutting method	DW	/
Surface quality	No visual defects (no stains, no finger prints, no oil, no glue). No color difference, No bright line	AOI
Chipping	Depth \leq 0.3 mm, Length \leq 0.5 mm; Count \leq 2 /pcs, no V-chip	Naked eyes or wafer inspection system
Micro cracks / holes	None	AOI

Schematic diagram of wafer size



A.Shape/Size: 210 \pm 0.25 mm
B.Diagonal: 295 \pm 0.25 mm
C.Corner Length: 1.41 \pm 0.5 mm
D.Right Angle: 90 \pm 0.15 $^{\circ}$