

N-type-G12-R (182.3×210*272) A

Monocrystalline Wafer



Comprehensive system certification

ISO9001:2022

ISO14001:2022

ISO45001:2022

Gokin

Key parameters

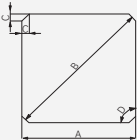
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Conductivity type	N-type	PN testing machine
Dopant	Phos.(磷)	/
Resistivity/ Ω -cm	0.6-1.6	Wafer inspection system
Lifetime/ μ s	≥ 800	BCT-400
Oxygen concentration/ppma	≤ 12	FTIR (ASTM F121-83)
Carbon Concentration /ppma	≤ 1	FTIR (ASTM F123-91)

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	G12-R	/
Geometry	Quasi square	/
Bevel edge shape	Round	/
Wafer Side length/mm	182.3/210 $\pm$ 0.25	AOI
Wafer Diameter/mm	272 $\pm$ 0.25	AOI
Arc length projection/mm	4.72/4.07 $\pm$ 0.5	AOI
Angle between adjacent sides/ $^{\circ}$	90 $\pm$ 0.15	AOI
Thickness/ μ m	130/135/140 $\pm$ 10	AOI
Batch mean/ μ m	$\geq 130/135/140$	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: 182.3/210 $\pm$ 0.25 mm B.Diagonal: 272 $\pm$ 0.25 mm C.Corner Length: 4.72/4.07 $\pm$ 0.5 mm D.Right Angle: 90 $\pm$ 0.15 $^{\circ}$