

Wafer Specifications

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| Material Properties | Crystal | Multicrystalline Silicon |
| | Oxygen concentration | $\leq 8 \times 10^{17}$ atoms/cm ³ |
| | Carbon concentration | $\leq 2 \times 10^{18}$ atoms/cm ³ |
| Electrical Properties | Specific resistivity | 0.5-2.0 Ω cm |
| | Minority carrier lifetime (μ -PCD photoconductive decay) | ≥ 1.8 μ s |
| | Conduction type | P (Boron doped) |
| Geometrical Properties | Shape of wafer | Full Square |
| | Length of wafer edges | 156.0 mm \pm 0.5 mm |
| | Bevel edge width | 2 \pm 0.5 mm (hypotenuse) |
| | Bevel edge angle | 45° \pm 10° |
| | Average thickness | 180 μ m \pm 20 μ m, 200 μ m \pm 20 μ m |
| | TTV | ≤ 50 μ m |
| Appearance | Corner chips | Length <5mm |
| | Cracks and pin holes | Depth <0.5 mm |
| | | Max. Number per wafer: 3 |
| | | No cracks and pinholes visible with naked eye |
| | Surface | As cut and cleaned |
| | Saw Marks | No stains visible with naked eye |
| | | Depth ≤ 20 μ m |
| | Crystal defects | No inclusions visible with naked eye |
| Process | Crystal growth technique | Direct Solidification |
| | Technique of Ingot formation | Casting by heat exchange method |
| | Squaring Technique | Wire sawing |