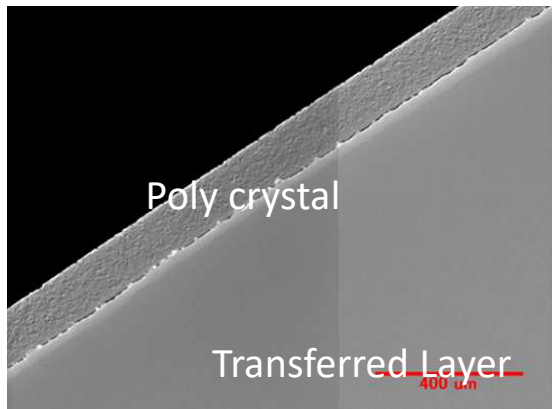
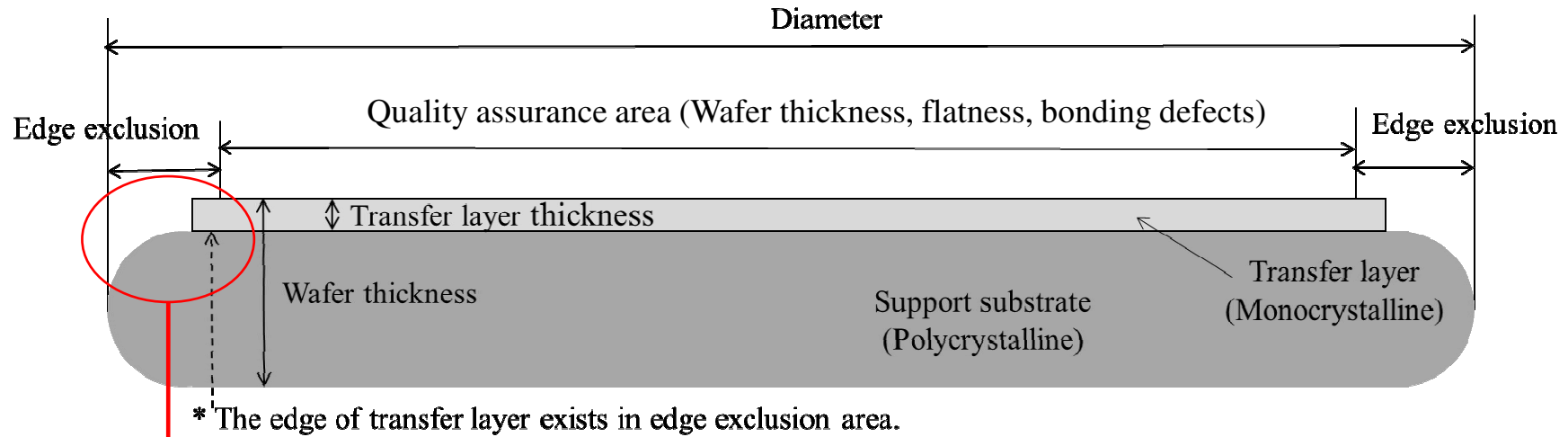
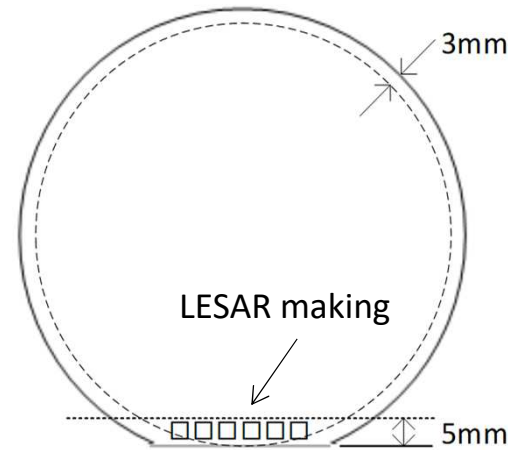


Standard Specification of Bonded wafer (1)



Edge image



Standard specification of Bonded wafer (2)

§ Specification

| No. | Items | Spec | Notes |
|-----|--------------------------|--------------------------------------|--|
| 1 | Diameter | 150mm \pm 0.2mm | Instruments: Edge-profiler |
| 2 | Oriental flat length | 47.5mm \pm 2mm | Same as above |
| 3 | Wafer thickness | 350 μ m \pm 25 μ m | Instruments: Flatness measuring instruments Edge Exclusion: 3mm |
| 4 | WARP | \leq 50 μ m | Same as above |
| 5 | TTV (GBIR) | \leq 15 μ m | Same as above |
| 6 | LTV (SBIR) | \leq 3 μ m (1cm ²) | Same as above |
| 7 | Frontside finish | CMP | N/A |
| 8 | Backside finish | Optical polish | N/A |
| 9 | Edge shape | 100 μ m \pm 25 μ m | Instruments: Edge-profiler |
| 10 | Transfer layer thickness | \geq 0.4 μ m | Instruments: Spectroscopic ellipsometer Edge Exclusion: 3mm |
| 11 | Void density | Discuss | Instruments: SICA Edge exclusive: Refer below |
| 12 | Untransfer density | \leq 1pcs/cm ² | Same as above |

§ Appearance

| No. | Items | Spec | Inspection method |
|-----|--------|------|--|
| 1 | Cracks | None | Transmitted light visual check by naked eye through LED back light |
| 2 | Chip | None | Visual check by naked eye with LED light |

General Specification for material wafer

§ Part of mono crystal

| item | Incoming specification |
|------------------------|---|
| Poly type | 4H-SiC |
| Dopant (n-type) | Nitrogen |
| Resistibility | 0.015-0.025 Ω cm |
| Micro-pipe density | $<1/\text{cm}^2$ |
| Face orientation | 4.0° off ($<11-20> + 0.5^\circ$ direction) |
| Flat orientation angle | $<11-20> \pm 5.0^\circ$ |

§ Part of poly crystal

| item | Incoming specification |
|-----------------|-------------------------------|
| Method | CVD |
| Dopant (n-type) | Nitrogen |
| Resistibility | $\leq 0.02 \Omega$ cm |