Standard specifications of 100 mm β-Ga₂O₃ epitaxial wafer (by HVPE)

Epitaxial layer

| Items | Specifications |
|--|-------------------------------------|
| Dopant | Si+Cl*1 (n-type) |
| Doping concentration | 1×10 ¹⁶ cm ⁻³ |
| Thickness *A value can be selected in increments 1 µm. | 5–10 μm |

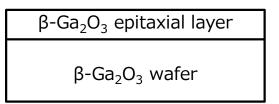
^{*1:} Unintentionally-doped

Epi-Wafer

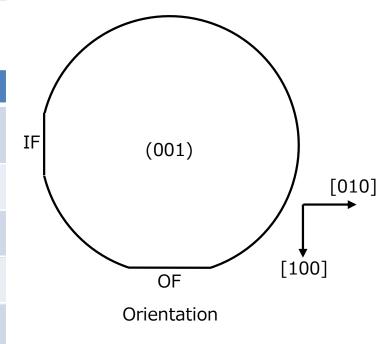
| Items | Specifications |
|---|--------------------|
| Substrate dopant | Sn (n-type) |
| Substrate resistivity | 0.007-0.042 Ω · cm |
| Surface orientation | (001) |
| Backside finish | CMP |
| Wafer thickness | 650 μm |
| XRD FWHM *Not included in a delivery inspection sheet | ≦50 arcsec |

Remarks

- 1 There are cases in which the other side of OF is chipped (a maximum of around IF width).
- 2 These products must be used for research and development purposes only.
- 3 The substrates must not be used as a seed crystal.
- 4 The specifications are subject to change without notice.



Cross section of β -Ga₂O₃ epitaxial wafer





Novel Crystal Technology, Inc.

Standard specifications of 2 inch β-Ga₂O₃ epitaxial wafer (by HVPE)

Epitaxial layer

| Items | Specifications |
|--|-------------------------------------|
| Dopant | Si+Cl*1 (n-type) |
| Doping concentration | 1×10 ¹⁶ cm ⁻³ |
| Thickness *A value can be selected in increments 1 µm. | 5–10 μm |

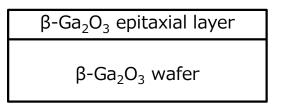
^{*1:} Unintentionally-doped

Epi-Wafer

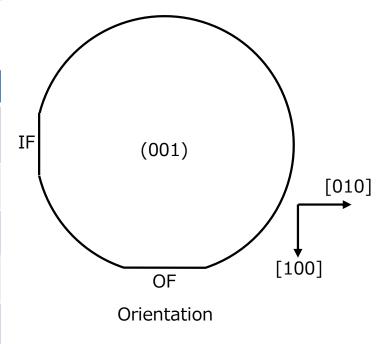
| Items | Specifications |
|---|--------------------|
| Substrate dopant | Sn (n-type) |
| Substrate resistivity | 0.007-0.042 Ω · cm |
| Surface orientation | (001) |
| Backside finish | CMP |
| Wafer thickness | 650 μm |
| XRD FWHM *Not included in a delivery inspection sheet | ≦50 arcsec |

Remarks

- 1 There are cases in which the other side of OF is chipped (a maximum of around IF width).
- 2 These products must be used for research and development purposes only.
- 3 The substrates must not be used as a seed crystal.
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Cross section of β-Ga₂O₃ epitaxial wafer





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