# Standard specifications of 100 mm β-Ga<sub>2</sub>O<sub>3</sub> epitaxial wafer (by HVPE)

## Epitaxial layer

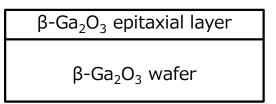
Items	Specifications
Dopant	Si (n-type)
Doping concentration *A value can be selected in increments of 1×10 <sup>16</sup> cm <sup>-3</sup> .	Specify a value in the range between $1 \times 10^{16}$ and $9 \times 10^{16}$ cm <sup>-3</sup>
Thickness *A value can be selected in increments 1 µm.	Specify a value in the range between 5 and 10 µm

### Wafer

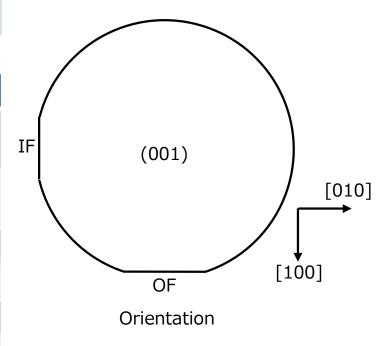
Items	Specifications
Dopant	Sn (n-type)
Doping concentration	Using the range of $1 \times 10^{18} \sim 2 \times 10^{19}  \mathrm{cm}^{-3}$
Orientation	(001)
Size	100 mm
Thickness	0.65 mm
XRD FWHM	≦350 arcsec
Off set angle	0°±1°

#### Remarks

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



Cross section of β-Ga<sub>2</sub>O<sub>3</sub> epitaxial wafer





Novel Crystal Technology, Inc.

# Standard specifications of 2 inch β-Ga<sub>2</sub>O<sub>3</sub> epitaxial wafer (by HVPE)

Epitaxial layer

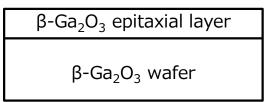
Items	Specifications
Dopant	Si (n-type)
Poping concentration *A value can be selected in increments of 1×10 <sup>16</sup> cm <sup>-3</sup> .	Specify a value in the range between $1 \times 10^{16}$ and $9 \times 10^{16}$ cm <sup>-3</sup>
Thickness *A value can be selected in increments 1 µm.	Specify a value in the range between 5 and 10 µm

### Wafer

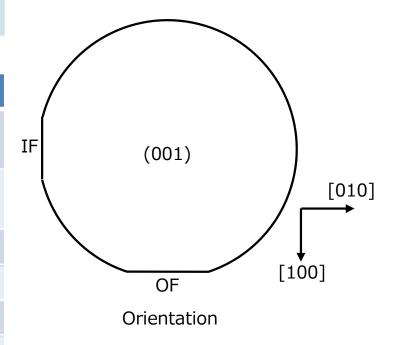
Items	Specifications
Dopant	Sn (n-type)
Doping concentration	Using the range of $1 \times 10^{18} \sim 2 \times 10^{19}  \text{cm}^{-3}$
Orientation	(001)
Size	2 inch
Thickness	0.65 mm
XRD FWHM	≦350 arcsec
Off set angle	0°±1°

#### Remarks

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



Cross section of β-Ga<sub>2</sub>O<sub>3</sub> epitaxial wafer





Novel Crystal Technology, Inc.