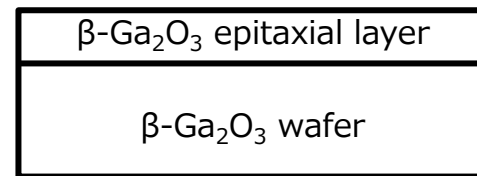


# Standard specifications of 10×15 mm<sup>2</sup> β-Ga<sub>2</sub>O<sub>3</sub> (010) epitaxial wafer (by MBE)

## Epitaxial layer

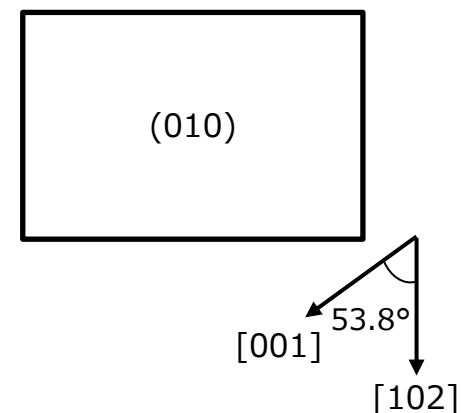
Items	Specifications	
Dopant	Si (n-type)	Undoped (semi-insulating)
Doping concentration (cm <sup>-3</sup> ) <small>*Selectable within the specified range.</small>	Specify a value between 1×10 <sup>17</sup> and 2×10 <sup>18</sup>	-
Thickness (nm) <small>*Selectable in 100 nm increments</small>	Specify a value between 100 and 500	



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

## Wafer

Items	Specifications	
Dopant	Sn (n-type)	Fe (semi-insulating)
Doping concentration (cm <sup>-3</sup> )	Using the range of 1–9×10 <sup>18</sup>	-
Resistivity (Ω·cm)	-	≥ 10 <sup>10</sup>
Orientation	(010)	
Size (mm <sup>2</sup> )	10×15	
Thickness (μm)	500	
XRD FWHM (arcsec)	≤ 150	
Off set angle (degree)	0 ± 1	



Orientation



### Remarks

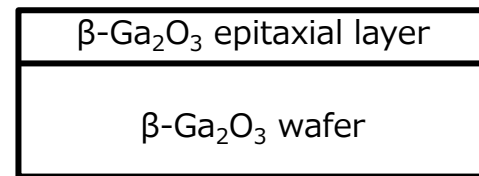
- 1 These products must be used for research and development purposes only.
- 2 The substrates must not be used as a seed crystal.
- 3 The specifications are subject to change without notice.

# Standard specifications of

## 10×15 mm<sup>2</sup> β-(Al<sub>x</sub>Ga<sub>1-x</sub>)<sub>2</sub>O<sub>3</sub> (010) epitaxial wafer (by MBE)

### Epitaxial layer

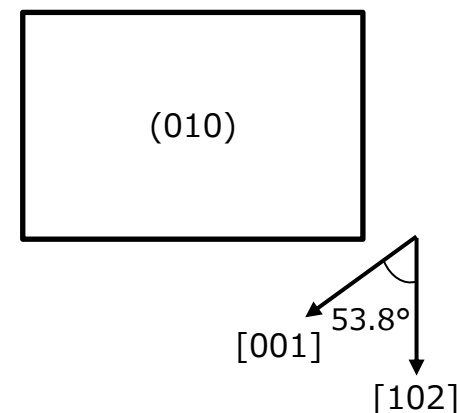
Items	Specifications
Al mole fraction	$x \leq 0.21$
Dopant	Si (n-type)
Doping concentration (cm <sup>-3</sup> )	$\leq 1 \times 10^{18}$
Thickness (nm)	$\leq 30$



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

### Wafer

Items	Specifications	
Dopant	Sn (n-type)	Fe (semi-insulating)
Doping concentration (cm <sup>-3</sup> )	Using the range of 1–9×10 <sup>18</sup>	-
Resistivity (Ω·cm)	-	$\geq 10^{10}$
Orientation	(010)	
Size (mm <sup>2</sup> )	10×15	
Thickness (μm)	500	
XRD FWHM (arcsec)	$\leq 150$	
Off set angle (degree)	0 ± 1	



Orientation



#### Remarks

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.