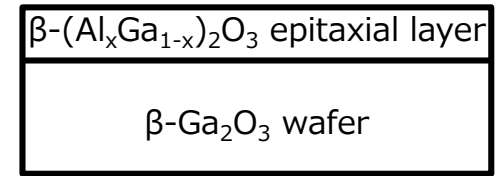


# Standard specifications of MBE $\beta$ -(Al<sub>x</sub>Ga<sub>1-x</sub>)<sub>2</sub>O<sub>3</sub> epitaxial wafers

Epitaxial layer (Growth method: MBE)

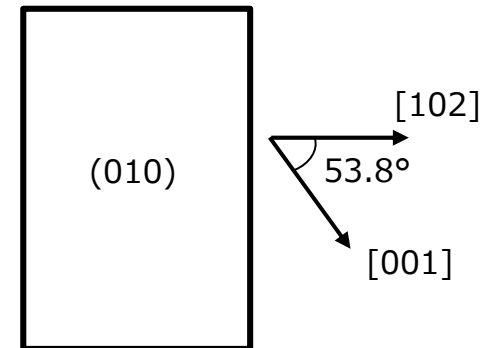
Property	Specification
Al mole fraction	$x \leq 0.23$
Dopant	Si (n-type)
Doping concentration	$\leq 1 \times 10^{18} \text{ cm}^{-3}$
Thickness	$\leq 60 \text{ nm}$



Cross section of  $\beta$ -Ga<sub>2</sub>O<sub>3</sub> epitaxial wafer

Wafer

Property	Specification	
Dopant	Sn (n-type)	Fe (semi-insulating)
Doping concentration	$1-9 \times 10^{18} \text{ cm}^{-3}$	-
Resistivity	-	$\geq 10^{10} \Omega \text{ cm}$
Orientation	(010)	
Size	10x15 mm	
Thickness	0.5 mm	
XRD FWHM	$\leq 150 \text{ arcsec}$	
Off set angle	$0^\circ \pm 1^\circ$	



Orientation



**Novel Crystal Technology, Inc.**

Remarks

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