Standard specifications of MBE β-Ga₂O₃ epitaxial wafers

Epitaxial layer (Growth method: MBE)

Property	Specification	
Dopant	Si (n-type)	Undoped (semi-insulating)
Doping concentration	Specify a value in the range between 1x10 ¹⁷ and 2x10 ¹⁸ cm ⁻³	-
Thickness	Specify a value in the range between 0.1 and 0.5 µm	

β-Ga ₂ O ₃ epitaxial layer		
β-Ga ₂ O ₃ wafer		

Cross section of β -Ga₂O₃ epitaxial wafers

Wafers

Property	Specification	
Dopant	Sn (n-type)	Fe (semi-insulating)
Doping concentration	1-9x10 ¹⁸ cm ⁻³	-
Resistivity	-	≥10 ¹⁰ Ωcm
Orientation	(010)	
Size	10x15 mm ²	
Thickness	0.5 mm	
XRD FWHM	≦150 arcsec	
Off set angle	0°±1°	

(010) [001] 53.8° [102] Orientation

Novel Crystal Technology, Inc.

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.