

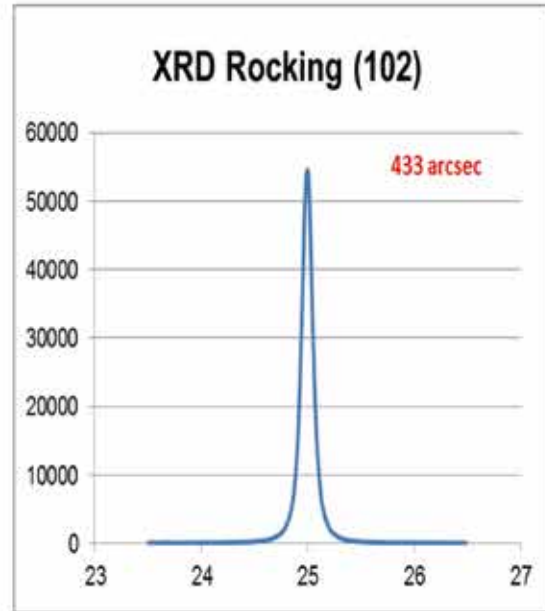
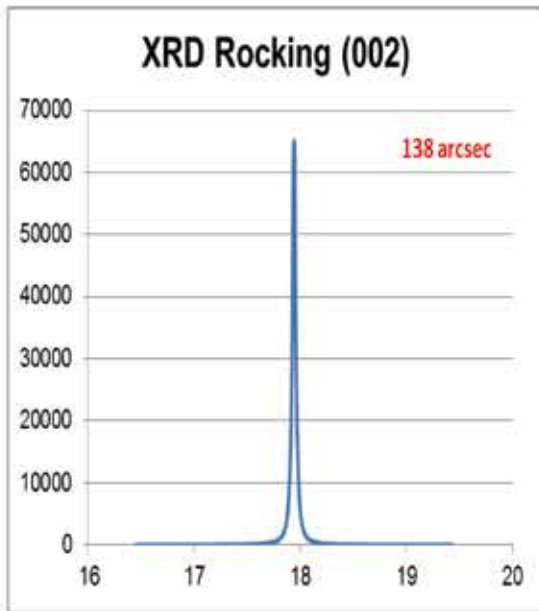
TOP Engineering's Aluminum Nitride (AlN) Templates are grown by High Temperature MOCVD System which is made by TOP Engineering's own technologies.

Aluminum Nitride Template provide crack free surface, high crystalline quality, excellent thickness uniformity and very smooth surface roughness. Our AlN Templates will support your epitaxial growth for high quality epi-wafer.

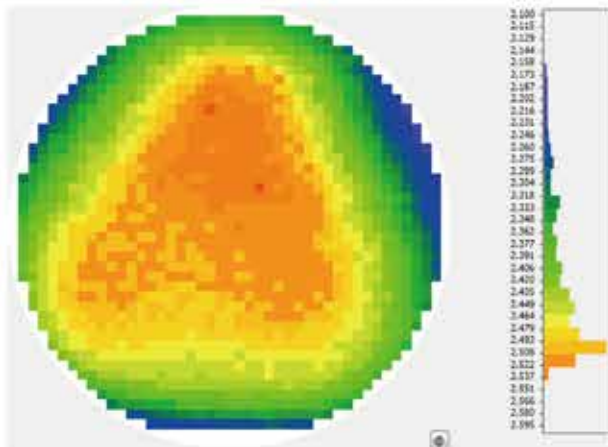
Items	Specification
Substrate	Sapphire
Diameter	50.8 mm
Substrate Thickness	430 ± 20 μm
Orientation	C-plane (0001) ± 0.2°
Primary Flat Orientation	a-plane
Primary Flat Length	16 ± 1.0 mm
AlN Thickness	2~3 μm (*)
(002) Plane Rocking Curve FWHM	≤ 250 (*)
(102) Plane Rocking Curve FWHM	≤ 500 (*)
Edge Exclude Zone	≤ 3 mm
Macro Defects Number	≤ 5/cm <sup>2</sup>
Surface Roughness (by AFM)	≤ 1 nm
Thickness Uniformity	≤ 10%

(\*): we can supply various specification

## XRD Rocking Curve

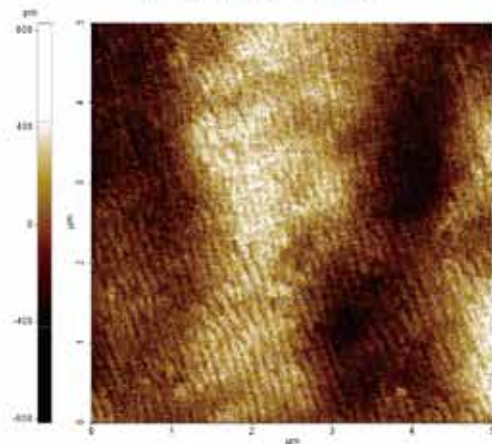


## Thickness Map Data



Average Thickness : 2.4 μm

## AFM Data



RMS : 0.2nm