

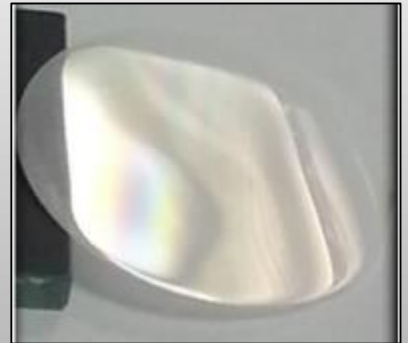


Enabling Materials for Advanced Electronics

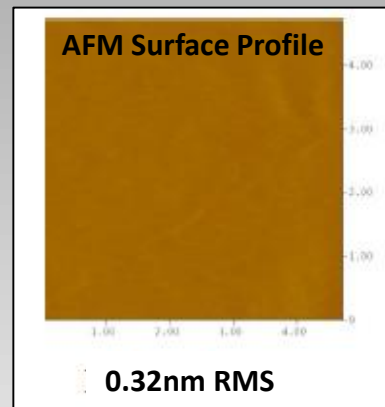
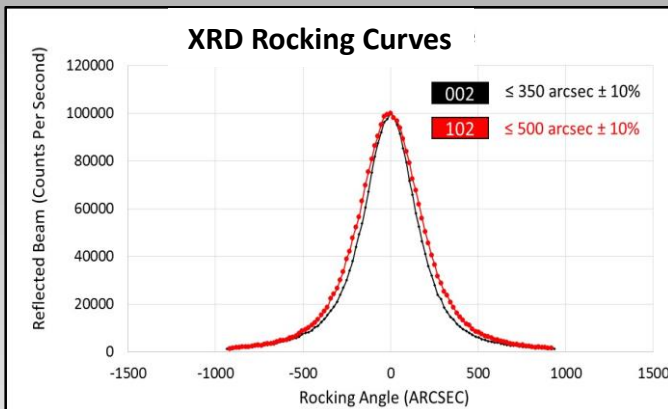
Nitride Solutions Inc.

AT50-EX

Aluminum Nitride Templates



The AT50-EX is the new generation of AlN templates from Nitride Solutions. Using NSI's state of the art facilities and technology, the AT50-EX provides world class crystalline quality, low defectivity and excellent thickness uniformity



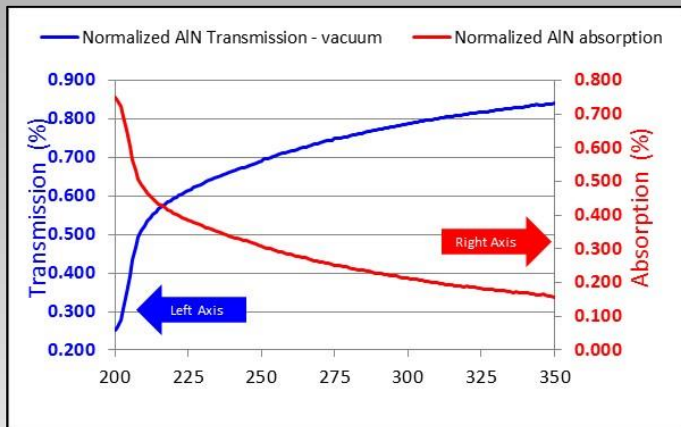
Nitride Solutions Inc. 3333 W Pawnee St Wichita, KS 67213
info@nitridesolutions.com



Nitride Solutions Inc.

Property	Specification
Carrier	Sapphire
Diameter	50.8 mm
Orientation	C-plane (0001) 0.2° off to M
Major Flat	m-plane (AlN)
AlN Thickness	1.8 ± 0.2 μm
002 Plane Rocking Curve FWHM	≤ 350 arcsec (Wafer Avg)
102 Plane Rocking Curve FWHM	≤ 490 arcsec (Wafer Avg)
Transmission @ 260 nm	≥ 80%
Screw Dislocation Density (Estimated)	~ 2 x 10 ⁸ cm ²
Edge Dislocation Density (Estimated)	~ 1 x 10 ⁹ cm ²
Exclusion Zone	≤ 5 mm
AFM Surface Finish	≤ 1 nm
Thickness Variance (Range/ Mean)	36% ± 10%
Rear Surface Finish	Matte: AT50-EX-SSP Polished: AT50-EX-DSP

UV Transmission/Absorption



AlN Thickness Map

