

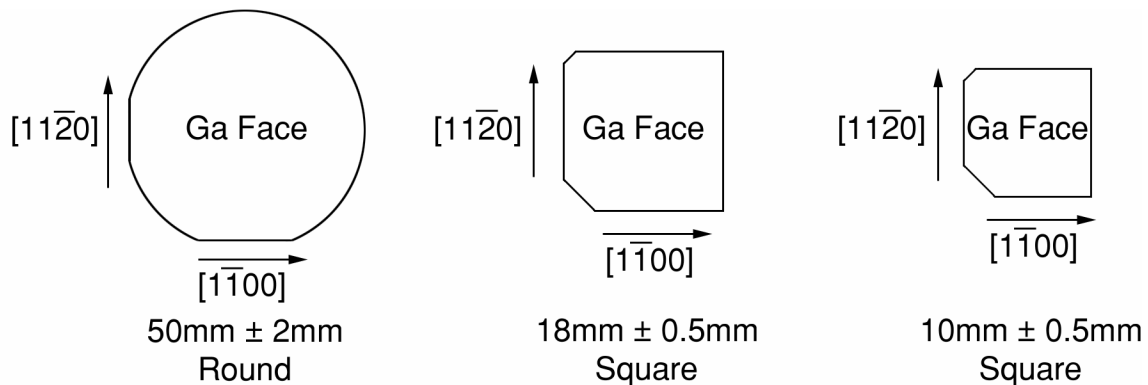
# C-Plane GaN Substrates Laser Quality

## Specifications

Sizes	10mm Square	18mm Square	2" Round
Dimensions	10mm ± 0.5mm x 10mm ± 0.5mm	18mm ± 0.5mm x 18mm ± 0.5mm	50mm ± 2mm
Nominal Thickness	475 ± 25 μm		
Orientation	c-axis (00.1) ± 1.0°		
Bow	<5 μm	<15 μm	<50 μm
TTV	<10 μm	<20 μm	<50 μm
Conduction Type:	n-type		
Resistivity	< 0.5 Ohm-cm		
Dislocation Density	<5x10 <sup>6</sup> cm <sup>-2</sup>		
Macro Defect Density	<5 cm <sup>-2</sup>	<5 cm <sup>-2</sup>	<10 cm <sup>-2</sup>
Front Surface Finish (Ga Face)	Epi-ready, RMS <0.5 nm		
Back Surface Finish (N Face)	Fine-ground, RMS <1.0 μm		
Edge Exclusion Area	1mm	1mm	5mm
Package	Single Wafer Container		

## Special Order Options

Back Surface Polish (secondary flat recommended)	✓	✓	✓
N-Face Polarity	✓	✓	



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Dislocation Density	<5x10 <sup>7</sup> cm <sup>-2</sup>		
Macro Defect Density	<10 cm <sup>-2</sup>	<15 cm <sup>-2</sup>	<25 cm <sup>-2</sup>
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