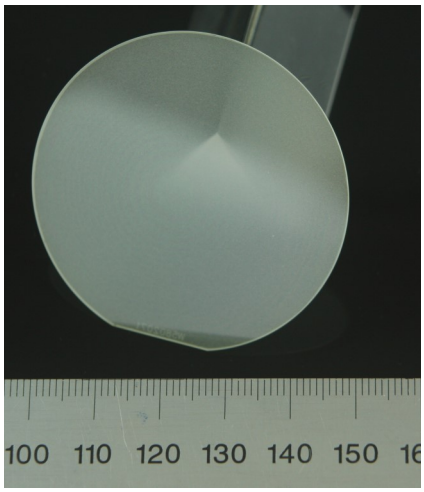
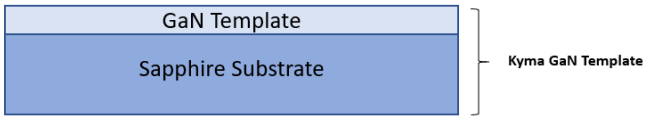
GaN Templates on Sapphire

Kyma's Gallium Nitride (GaN) templates are grown by HVPE and provide a high purity (carbon-free) GaN buffer for subsequent device epitaxy. GaN templates are used for:

- Subsequent epitaxial growth studies or device efforts
- GaN fabrication process development activities
- Basic research of GaN





Template Types:	Si-doped (N+)	Undoped (N-)	P-type*	Semi-Insulating
Carrier Concentration	>1x10^{18}/cm^3	n/a	>5x10^{17}/cm^3	n/a
Resistivity	<0.05 Ohm-cm	<5 Ohm-cm	<0.5 Ohm-cm	>1x10^6 Ohm-cm
Orientation	c-axis (00.1) ± 1.0°	c-axis (00.1) ± 1.0°	c-axis (00.1) ± 1.0°	c-axis (00.1) ± 1.0°
Available Sizes	2"-6"	2"-6"	2"-4"	2"
Available Thicknesses	500nm-5um	500nm-5um	1-5um	500nm-5um

GaN Template Specifications:	Prime	Production	Rider**
Thickness Uniformity:	<10%	<10%	n/a
Edge Cracking:	none	none	n/a
Surface Finish:	Epi-ready, <1nm RMS	As grown	As grown

**p-type templates grown by MOCVD*

***Rider grade templates are GaN templates which have missed one or more of Kyma's specifications and are sold from existing stock and may have limited availability—inquire for details on current availability*

Kyma Technologies 8829 Midway West Road Raleigh, NC 27617 919-789-8880 sales@kymatech.com