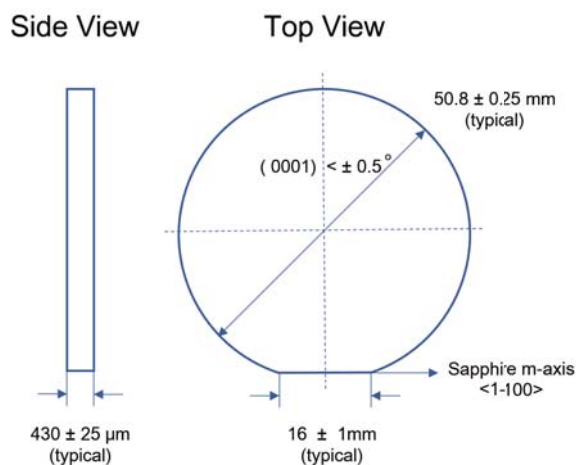


# AlN Template on Sapphire



Typical specifications of AlN template



Properties		Typical Specifications
Substrate	Material	Sapphire
	Diameter	$50.8 \text{ mm} \pm 0.25 \text{ mm}$
	Thickness	$430 \mu\text{m} \pm 25 \mu\text{m}$
	Orientation	C-plane (0001) $\pm 0.2^\circ$
	Backside finish	Rough/Optical polishing
AlN layer	Thickness	$1.5 \mu\text{m} \pm 15\%$ (Available thickness: 0.5~3 $\mu\text{m}$ )
	FWHM of X-ray Rocking Curve ( $\omega$ -scan)	$< 600 \text{ arcsec}$ for (102)
	Transmission @ 260 nm (Baseline : Sapphire)	$> 70\%$
	Surface of AlN	CMPPolishing Epi-Ready (as grown)
	Edge Excursion Zone	$< 3 \text{ mm}$
	Marco Defects ( $> 50 \mu\text{m}$ )	$< 5 \text{ ea/cm}^2$
	Conductivity	Insulating

