

GANKIBAN: CN50MM

GaN Wafers

GaN wafers enable "GaN-on-GaN" structure of GaN-based optoelectronic and electronic devices such as blue/green laser diodes, light emitting diodes, high-power switching transistors, and RF transistors. GANKIBAN CN50MM is an n⁺ wafer produced by SixPoint's proprietary NEAT (near equilibrium ammonothermal) method. High carrier concentration attains low series resistance for reduction of heat generation during high-current operation, It is suitable for vertical devices including edge-emitting laser diodes, vertical high-power pn diodes and vertical high-power transistors.

Applications

GaN-based devices using homoepitaxy

Specifications

Wafer size	50 mm diameter, with m-plane primary flat, a-plane secondary flat
Wafer thickness	350 ~ 450 micron
Orientation	c plane Miscut angle 0±0.2° (a-direction), 0.4±0.2° (m-direction)
Surface finish	Ga-face --- CMP N-face --- as processed (CMP optional)
XRD FWHM from (002)	< 100 arcsec
Conduction type	n ⁺ -type (n > 1x10 ¹⁹ cm ⁻³)

