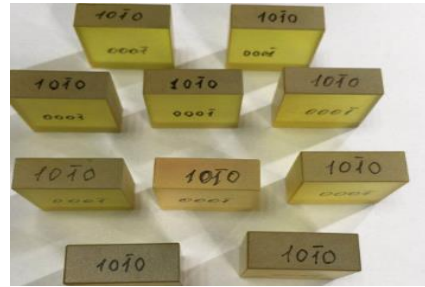


Zinc oxide ZnO :

Zinc oxide ZnO

Zinc oxide (ZnO) is a very good substrate material for GaN thin films. It has an exciton binding energy of 60mev and a bandwidth of 3.73ev at room temperature, making it a luminescent material for ultraviolet and visible light. At the same time, due to its transparent visible region, large electromechanical coupling coefficient, and the ability to adsorb and analyze gas molecules on its surface, it is expected to be used in energy limiters with high peak energy, large-diameter and high-quality GaN substrates, and future 5GHz. It has been widely used in wireless communication, high-electric field equipment, high-temperature high-energy electronic devices, high-electric field equipment, high-temperature high-energy electronic devices, etc.



Product parameters:

Crystal structure	hexagonal
Lattice constant	a=3.252Å , c=5.313Å
density	5.7 (g/cm ³)
growth method	Hydrothermal
hardness	4 (mohs)
melting point	1975°C
Thermal expansion coefficient	6.5 x 10 ⁻⁶ /°C//a , 3.7 x 10 ⁻⁶ /°C//c
heat capacity	0.125 cal/gm
Thermoelectric constant	1200mv/k @ 300°C
thermal conductivity	0.006 cal/cm/k
Through range	0.4-0.6um > 50% at 2mm
crystal direction	<0001>, <11-20>, <10-10>±0.5°
Dimensions (mm)	25×25×0.5mm, 10×10×0.5mm, 10×5×0.5mm, 5×5×0.5mm
Surface roughness	Ra≤5Å
polishing	single or double sided
Package	Class 100 clean bag, Class 1000 ultra-clean room