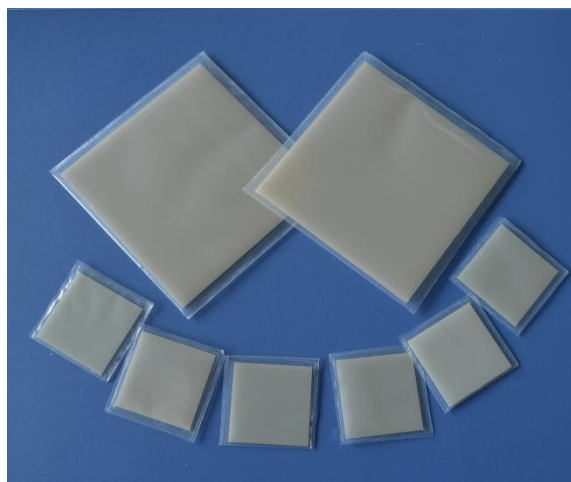




Alumilum Nitrite Ceramics (AlN)

AlN ceramic substrate has high thermal conductivity, good electrical performance and non-toxic. Its thermal expansion coefficient close to Si wafer, and it is an ideal material to replace BeO ceramics. It is mainly used in high-density hybrid circuits, microwave power devices, power electronic devices, optoelectronic components, semiconductor refrigeration and other products as high-performance substrate materials and packaging materials.



PARAMETERS

Item No.	AN5113	AN5116
Purity (wt%)	98%	99%
Density (g/cm ³)	>3.25	>3.26
Thermal Conductivity (W/mK)	100-300	>170
Thermal Expansion (10 ⁻⁶ /K)	<4.3	<4.2
Dielectric Strength (Kv/mm)	>15	>15
Dielectric Constant (at 1MHz)	8.7	8.7
Loss Tangent (10 ⁴ @1 MHz)	3-7	3-7
Volume Resistivity (ohm-cm)	>1014	>1014
Flexural Strength (Kg/mm ²)	>25	>30
Maximum Size	140×100mm	
Surface Roughness	25~100nm	
Attached: purity analysis table		
Item No.	AIN5113	AIN5116
Purity (wt%)	98%	99%
N (WT%)	32.5~33	>33.4
O (WT%)	<1.5	<1.0
C (WT%)	<0.4	<0.2
Cationic (ppm)	<500	<300