



# AlN(Aluminum Nitride) Materials

Normal pressure sintering Aluminum Nitride for Semiconductors.

## Characteristics

- The heat conduction, heat radiation rate is large, and soaking characteristics are high.
- By thermal expansion near Si, I prevent the transformation of the wafer by the temperature change and reduce particle generating by the detachment of the deposit film.
- Corrosion resistance of the fluorine-based gas is high.
- AlN is superior in plasma characteristics-resistant.

Specification;

【max】       $\phi 500$               【Thickness】      0.25-30mm

Thermal conductivity	W/m · K(RT)	170
Heat radiation rate	(100°C)	0.93
Coefficient of thermal expansion	$10^{-6}/^{\circ}\text{C}(\text{RT} \sim 400^{\circ}\text{C})$	4.5
Insulation resistance	$\Omega \cdot \text{cm}(\text{RT})$	$>10^{13}$
Insulation dielectric voltage	kV/mm(RT)	15
Dielectric constant	(1MHz)	8.8
Dielectric loss	$10^{-4}(1\text{MHz})$	5
Bending strength	MPa	350
Density	$\text{g}/\text{cm}^3$	3.3
Y(Yttrium)	wt%	3.4
O(Oxygen)	%	1.7



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