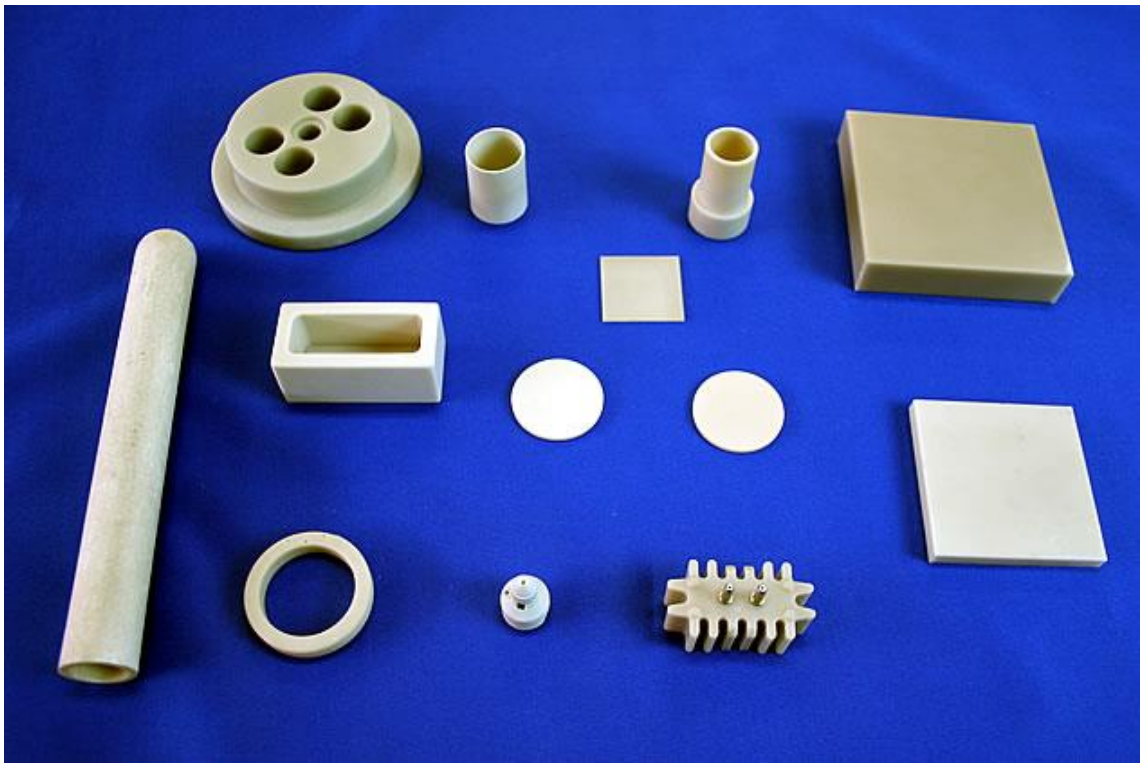
Nishimura Aluminum Nitride



-ALN-170　High thermal conductivity(170W)
-ALN-HY0　High purity

Character　：ALN material has good thermal conductivity, heat radiation, and electric insulation. Also it has great thermal shock resistance.

Thermal expansion go well with a Silicon wafer.

Good corrosion resistance to fluorine-containing gases.

Good plasma resistance.

Shape　：Plate, rod, pipe･･･Any kind of shape is acceptable.

Manufacturing method：　Pressing, injection molding, CIP, or Green processing

Usefulness　：ALN material is used for heat sink, base plate, soaking plate for heater, crucible, and a parts for semiconductor devices(CVD, etching, so on..)

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Nishimura Aluminum Nitride

Usefulness : Susceptor, Electro static chucks, Vacuum chucks for heater soaking board, heater, dummy wafer, sputtering target, and so on.

Size : ~φ/□ 550mm
Thickness 0.25 ~ 30mm

ALN material / Propertie		Nsihimura Aluminum nitride	
		ALN-170	ALN-HYO
Thermal conductivity	W/m・K(RT)	170	90
Heat radiation	(100℃)	0.93	0.93
Thermal expansion coefficient	10^{-6}/℃(RT~400℃)	4.5	4.5
Insulation resistance	Ω・cm(RT)	$>10^{13}$	$>10^{13}$
Dielectric voltage	kV/mm(RT)	15	15
Dielectric constant	(1MHz)	8.8	8.8
Dielectric loss	10^{-4}(1MHz)	5	5
Bending strength	kgf/mm^2	35	40
Density	g/cm^3	3.32	3.23
Yttria	%	3.5	0
Oxygen	%	1.5	0.58
Metallic impurity	ppm	<500	<500

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