

Material	Silicon Nitride(Si_3N_4)		
	Gas pressure sintering Si_3N_4	Hot pressing sintering Si_3N_4	High thermal conductivity Si_3N_4
Density (g/cm ³)	3.2	3.3	3.25
Flexure strength (MPa)	700	900	600~800
Young Modulus (GPa)	300	300	300~320
Poisson's ratio	0.25	0.28	0.25
Compressive strength (MPa)	2500	3000	2500
Hardness (HV)	1500	1600	1500
Fracture toughness (MPa*m ^{1/2})	5~7	6~8	6~7
Maximum working temperature (°C)	1100	1300	1100
Thermal conductivity (W/m*K)	20	25	80~100
Thermal expansion coefficient (/°C)	3×10^{-6}	3.1×10^{-6}	3×10^{-6}
Thermal shock resistance (ΔT °C)	550	800	>800

* The actual product may have slight differences due to factors such as the composition of the raw material, molding and sintering process, etc.