

## Silicon Nitride Ceramic Material Properties - SU0983

Properties	Unit	Value
Color	-	Gery/Black
Density	g/cm <sup>3</sup>	3.22-3.25
HV Hardness	GPa	1600
Toughness	MN/m	6.0
Bending Strength	kgf/cm <sup>2</sup>	80-100
Heat Impact	ΔT,°C	900
Coefficient of Thermal Expansion	×10 <sup>-6</sup> /°C	3.5
Max Usage Temperature	°C	1200
Corrosion Resistance (Acid & Alkali)	-	Good
Thermal Conductivity	W/(m·K)	29
Magnetism	-	Non
Insulation	-	Insulation
Indentation Strength	MPa	3500
Fracture Toughness	MPa·√m	7
Weber Modulus	GPa	>15
Modulus of elasticity	GPa	320
Poisson Ratio		0.26
Resistivity	Ω·m	>10 <sup>14</sup>
Specific Heat	J/(kg·K)	800
Dimensional Stability		good

*Remark: The value is just for review. Different working conditions may cause some difference.*