

Items	Measuring method	Unit		Silicon nitrides(Si ₃ N ₄)
				TSN-90
Density	JIS Z8807	RT	g/cm ³	3.35
Specific heat	JIS C2141		J/kg·K	650
Thermal conductivity	JIS R1611		W/m·K	90
Coefficient of thermal expansion	JIS C2141	RT~500°C	x10 ⁻⁶ /K	3.4
Dielectric strength	JIS C2110-1	50Hz	kV/mm	25
Volume resistivity	JIS C2141	RT	Ω·cm	1x10 ¹⁵
Dielectric constant	JIS C2141	1MHz		8
Dielectric factor	JIS C2141	1MHz	tanδx10 ⁻⁴	8
Three point bending strength	JIS C2141	RT	MPa	680
Fracture toughness	JIS R1607	RT	MPa·m ^{1/2}	6.5
Young's modulus□	JIS R1602	RT	GPa	300
Poisson's ratio	JIS R1602			0.27
Features				High thermal conductivity High strength
Recommendatory applications				Substrates for semiconductor assembly Radiator plates(for compression force) Heat sinks

The values in the table are reference values,not guaranteed values.