

Reaction Bonded Silicon Nitride/Si₃N₄ Sheet

Formula: Si₃N₄

Thickness: 4mm

Length 1: 25mm

Length 2: 25mm

UOM Code: 187-501-46

SKU: 1000072537-group

Product Code: SI63-SH-000100

Material Properties for Ceramics

Chemical Resistance

Element	Value
Acids - concentrated	Fair
Acids - dilute	Good
Alkalis	Fair
Halogens	Good
Metals	Fair

Electrical Properties

Element	Value
Dielectric constant	10
Volume resistivity(Ohmcm)	>10 ¹² @25

Physical Properties

Element	Value
Apparent porosity(%)	15-23
Density(gcm ⁻³)	2.4

Thermal Properties

Element	Value
Upper continuous use temperature(C)	1200-1500
Specific heat(J K ⁻¹ kg ⁻¹)	690@25°C

Element	Value
Thermal conductivity(W m ⁻¹ K ⁻¹)	10-16@20°C
Coefficient of thermal expansion(x10 ⁻⁶ K ⁻¹)	3.3@20-1000°C

Mechanical Properties

Element	Value
Tensile modulus(GPa)	170-220
Hardness - Vickers(kgf mm ⁻²)	800-1000
Shear strength(MPa)	190-240
Tensile strength(MPa)	160

Pultrusions

Element	Value
Compressive strength(MPa)	550-650