Reaction Bonded Silicon Nitride/Si3N4 Tube

Formula: Si?N?
Outside Diameter: 8mm
Wall Thickness: 1.5mm
Inside Diameter: 5mm
Length: 100mm
UOM Code: 186-190-72
SKU: 1000071901-group
Product Code: SI63-TB-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?@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

Element	Value
Specific heat(J K?¹ kg?¹)	690@25°C
Thermal conductivity(W m?¹ K?¹)	10-16@20°C
Coefficient of thermal expansion(x10?? 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