

Reaction Bonded Silicon Carbide/SiSiC Rod

Formula: SiC

Diameter: 15mm

Length: 100mm

UOM Code: 316-266-90

SKU: 1000133445-group

Product Code: SI64-RD-000176

Material Properties for Ceramics

Chemical Resistance

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

Physical Properties

Element	Value
Apparent porosity(%)	0
Density(gcm ³)	3.1

Thermal Properties

Element	Value
Upper continuous use temperature(C)	1350
Specific heat(J K ⁻¹ kg ⁻¹)	1100@25°C
Thermal conductivity(W m ⁻¹ K ⁻¹)	150-200@20°C
Coefficient of thermal expansion(x10 ⁻⁶ K ⁻¹)	4.3-4.6@20-1000°C

Mechanical Properties

Element	Value
Tensile modulus(GPa)	410

Element	Value
Hardness - Vickers(kgf mm ²)	2500-3500
Tensile strength(MPa)	310

Pultrusions

Element	Value
Compressive strength(MPa)	2000-3500

Electrical Properties

Element	Value
Volume resistivity(Ohmcm)	10 ² -10 ³ @25