Hot-pressed Silicon Carbide Sputtering Target

Formula: SiC
Thickness: 1.5mm
Diameter: 20mm
UOM Code: 068-750-62
SKU: 1000009580-group
Product Code: SJ60-ST-000150

Material Properties for Ceramics

Chemical Resistance

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

Electrical Properties

Element	Value
Dielectric constant	40
Volume resistivity(Ohmcm)	10^{3}-10?@25

Physical Properties

Element	Value
Apparent porosity(%)	0
Density(gcm?^{3})	3.15

Thermal Properties

Element	Value
Melting point(C)	2650-2950
Upper continuous use temperature(C)	1500-1650
Specific heat(J K?^{1} kg?^{1})	670-710@25°C

Element	Value
Thermal conductivity(W m?¹ K?¹)	90-160@20°C
Coefficient of thermal expansion(x10?? K?¹)	4.5@20-1000°C

Mechanical Properties

Element	Value
Tensile modulus(GPa)	200-500
Hardness - Vickers(kgf mm?²)	2400-2800
Shear strength(MPa)	210-380
Tensile strength(MPa)	400

Pultrusions

Element	Value
Compressive strength(MPa)	1000-1700