

General Properties

Pyrolytic Graphite is an ultra-pure product near theoretical density and is extremely anisotropic. Mechanical, thermal, and electrical properties are superior to conventional graphites.

Applications

- Sputtering targets.
- Ion beam grids.
- Ion implant hardware.
- Liquid phase epitaxy hardware.
- Thermal insulators.
- Rocket nozzles.
- Heater elements.

Physical Properties

Property	Unit	Pyrolytic Graphite
Density	g/cm ³	2,18–2,22
Flexural Strength	MPa	120 'a b' direction
Tensile Strength	MPa	80 'a b' direction
Compressive Strength	MPa	100 'a b' direction
Young's Modulus	MPa	3x10 ⁶ 'a b' direction
Thermal Expansion	cm/cm/ °C	0,5x10 ⁻⁶ 'a b' direction 20x10 ⁻⁶ 'c' direction
Thermal Conductivity	Watts/m °C	300 'a b' direction 3.5 'c' direction
Electrical Resistance	Ohm*cm	0,5x10 ⁻³ 'a b' direction 0,5 'c' direction
Crystal Structure	—	Hexagonal
Melting Point	°C	Sublimes at 3650

NOTE: This data shows typical values and does not represent a specification.

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