

Carbon Fiber LCP

Catlog Number: CRSM-0031

• Description

High-precision LCP composite with carbon fiber, offering near-zero shrinkage and exceptional vibration damping for high-frequency electronic components.

• Basic Information

Base Material: Liquid Crystal Polymer

Reinforcement Type: Chopped Carbon Fiber

Reinforcement Volume (%): 0.15

Density (g/cm³): 1.52

Tensile Strength (MPa): 145

Tensile Modulus (MPa): 18500

Elongation at Break (%): 1.2

Flexural Strength (MPa): 210

Flexural Modulus (MPa): 16500

Heat Deflection Temp (0.45MPa): 260

Glass Transition Temp (Tg): 110

Melting Point (°C): 335

Thermal Conductivity (W/mK): 0.45

Flame Retardancy (UL94): V-0

Surface Resistivity (Ω): 10⁵ - 10⁸

Water Absorption (%): 0.02

Printing Temp (°C): 340-370

Bed Temp (°C): 100-120

Chamber Temp (°C): 80-110

Nozzle Type: Hardened Steel

Layer Height (mm): 0.1

Shrinkage Rate (%): 0.05

Continuous Use Temp (°C): 220

Impact Strength (kJ/m²): 10

 For Research or Industrial Raw Materials, Not For Personal Medical Use!