Eata Battery

Graphite-Filled Epoxy BPP

Catlog Number: FCSM-0084

Description

High-conductivity composite bipolar plate manufactured via compression molding of graphite-filled epoxy resin for automotive fuel cell stacks.

Basic Information

Material Composition: Graphite / Epoxy Resin

Thickness (μm): 1200

Density (g/cm³): 1.9

Surface Resistance (mΩ·cm²): < 10

Tensile Strength (MPa): 55

Thermal Conductivity (W/m·K): 28

Porosity (%): < 0.3

Operating Temp Max (°C): 140

Flexural Strength (MPa): 68

Corrosion Resistance (μA/cm²): < 1.5

Contact Angle (°): 95

Gas Permeability ($cm^3/cm^2 \cdot s$): < 10^{-8}

Coefficient of Thermal Expansion (10^{-6}/K): 10

Shore Hardness: 85 (Shore D)

Water Uptake (%): < 0.5

Ash Content (%): < 0.1

Mean Pore Size (μm): N/A

Compressive Strength (MPa): 140

Electrical Conductivity (S/cm): 180

Specific Surface Area (m²/g): N/A

Young's Modulus (GPa): 15

Chemical Stability: High Acid Res

Coating Material: None

Surface Roughness (Ra): 0.8

Tel: 1-631-637-0420 | 1-631-533-0595
Email: info@eataray.com
Suite 103, 17 Ramsey Road, Shirley, NY 11967, USA