THERMOPLASTIC MATERIAL APPLICATIONS

Ultem Connectors

Ultem electronic connectors are high-performance components used in critical electronic applications where thermal stability, electrical insulation, and dimensional accuracy are essential. Common applications include sockets, circuit boards, and structural components in high-temperature electronic systems.

Also referred to as: High-Temperature Insulators, Ultem Socket Components, Ultem Circuit Housings, Dielectric Connectors

DETAILS ON ULTEM:

High Dielectric Strength – Provides excellent insulation, preventing current leakage even under high voltage. Thermal Stability – Retains dimensional and mechanical

properties up to 340°F continuous use. Mechanical Strength - Handles impact and mechanical loads in demanding environments.

Chemical Resistance – Resistant to most hydrocarbons, including oils and gasoline.

TYPICAL USAGE: Ultem is chosen for high-performance electronic applications requiring reliable insulation, thermal endurance, and structural integrity.

DESIGN CONSIDERATIONS:

Machining – Limited lubrication options; tool wear may occur without optimized setups.

Wear Resistance - Not recommended for high-friction or load-bearing wear applications.

Chemical Compatibility – Avoid use with partially halogenated hydrocarbons, phenols, acetates, ketones, and strong bases.

COMMON APPLICATIONS: Insulators, Coil Bobbins, Chip Carriers, Circuit Boards, Wafer Handling, and Etching Equipment



MATERIAL

Ultem PEI

BENEFITS

- **Exceptional mechanical properties**
- Thermal stability
- Chemical resistance
- **Excellent electrical insulation** properties

INDUSTRIES

- Electronic/Semiconductor
- Automotive

OUESTIONS

- What is the application/where is this being used
- What is the operating environment? (Temperature, chemical, humidity/moisture)
- What sizes and tolerances are required?











WEB: www.atlasfibre.com EMAIL: sales@atlasfibre.com PHONE: (847) 674-1234