PPS

PPS provides high temperature and chemical resistance.

Mechanical properties

Ultimate tensile strength	64.7 - 79.1 MPa
Yield strength	51.2 - 63.8 MPa
Young's modulus (modulus of elasticity)	1.58 - 1.97 GPa
Elongation at break	200 - 300 %
Hardness	16.4 - 18.1 HV

Physical properties

UV resistance	Fair

Thermal properties

Maximum service temperature	90 - 130 °C
Thermal expansion coefficent	88.2 - 91.8 × 10^-6/°C
Thermal conductivity	0.294 - 0.306 W/(m·°C)

Electrical properties

ESD Safety	No

Common applications

Transportation	
Electronics & Electrical Components	

PPS CNC Machining Applications & Parts

PPS is an inherently flame-retardant material that offers exceptional chemical resistance, high thermal stability, and excellent dimensional integrity, making it a robust solution for harsh environment engineering.

Typical Parts We Machine from PPS:

- **Chemical Processing:** Pump Parts, Valve Liners, Metering Components
- **High-Temperature Electrical:** Connector Housings, Bobbins, Relay Insulators (UL94 V-0)
- **Under-Hood Automotive:** Sensor Housings, Fuel System Components, Brackets

Our Machining Advantage:

We utilize specialized tool paths and coolants to machine PPS without inducing internal stress, ensuring parts maintain their flatness and stability in operation.

Get an Instant Quote your custom PPS parts today.