PET

PET offers good mechanical strength and dimensional stability.

Mechanical properties

Ultimate tensile strength	50 - 90 MPa
Yield strength	47 - 90 MPa
Young's modulus (modulus of elasticity)	2 - 3 GPa
Elongation at break	20 - 300 %
Hardness	80 - 96 HRM

Physical properties

UV resistance	Poor

Thermal properties

Maximum service temperature	60 - 115 °C
Thermal expansion coefficent	40 - 60 10^-6/ºC
Thermal conductivity	0.15 - 0.28 W/(m·°C)

Electrical properties

ESD Safety	No

Common applications

Mechanical engineering	
Electrical and electronics industry	
Medical industry	
Shipbuilding industry	

PET CNC Machining Applications & Parts

PET offers an excellent balance of mechanical strength, chemical resistance, and dimensional stability, making it ideal for a wide range of mechanical and consumer-facing components that we precision machine to your specifications.

Typical Parts We Machine from PET:

- **Mechanical Components:** Gears, Bearings, Bushings, Shims
- **Electrical Insulators:** Connector Housings, Terminal Blocks, Sensor Mounts
- **Medical & Packaging:** Prototype Housing Components, Fluid Handling Parts, Custom Fixtures

Our Machining Advantage:

Our controlled machining process ensures clean cuts and prevents melting or chipping, delivering parts with excellent edge quality and precise dimensions from this versatile material.

Get an Instant Quote your custom PET parts today.