



**Product Data Sheet &
General Processing Conditions**

**PermaStat® 302 FR
Polycarbonate (PC)
ESD Protection
Permanently Anti-static
Glass Fiber
Flame Retardant**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Specific Gravity	1.38	1.38	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0025 - 0.0045 in/in	0.25 - 0.45 %	D 955

MECHANICAL

Impact Strength, Izod notched 1/8 in (3.2 mm) section	1.1 ft-lbs/in	59 J/m	D 256
unnotched 1/8 in (3.2 mm) section	10.0 ft-lbs/in	534 J/m	D 4812
Tensile Strength	8500 psi	59 MPa	D 638
Tensile Elongation	4.0 - 6.0 %	4.0 - 6.0 %	D 638
Tensile Modulus	0.50 x 10 ⁶ psi	3448 MPa	D 638
Flexural Strength	14000 psi	97 MPa	D 790
Flexural Modulus	0.50 x 10 ⁶ psi	3448 MPa	D 790

ELECTRICAL

Volume Resistivity	1E+09 - 9.99E+10 ohm.cm	1E+09 - 9.99E+10 ohm.cm	D 257
Surface Resistivity	1E+10 - 9.99E+11 ohm/sq	1E+10 - 9.99E+11 ohm/sq	D 257
Surface Resistance	1E+09 - 9.99E+10 ohm	1E+09 - 9.99E+10 ohm	ESD STM11.11
Static Decay MIL-PRF-81705D, 5kV to 50 V, 12% RH	< 2.00 s	< 2.00 s	FTMS101C 4046.1

THERMAL

Ignition Resistance* Flammability**	V-0 @ 1/16 in	V-0 @ 1.5 mm	D 3801
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PROPERTY NOTES

Data herein is typical and not to be construed as specifications.

Unless otherwise specified, all data listed is for natural or black colored materials. Pigments can affect properties.

* This rating is not intended to reflect hazards of this or any other material under actual fire conditions.

** Values per RTP Company testing.

GENERAL PROCESSING FOR INJECTION MOLDING

	English	SI Metric
Injection Pressure	6000 - 10000 psi	41 - 69 MPa
Melt Temperature	430 - 470 °F	221 - 243 °C
Mold Temperature	150 - 250 °F	66 - 121 °C
Drying	4 hrs @ 250 °F	4 hrs @ 121 °C
Moisture Content	0.02 %	0.02 %
Dew Point	-20 °F	-29 °C

PROCESSING NOTES

Desiccant Type Dryer Required.