Product Data Sheet &
General Processing Conditions

EMI 2162
Polyetherimide (PEI)
Stainless Steel Fiber
Electrically Conductive
EMI/RFI/ESD Protection

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	15 %	15 %	
Specific Gravity	1.42	1.42	D 792
Molding Shrinkage			
1/8 in (3.2 mm) section	0.0050 - 0.0080 in/in	0.50 - 0.80 %	D 955
MECHANICAL			
Impact Strength, Izod			
notched 1/8 in (3.2 mm) section	0.8 ft-lbs/in	43 J/m	D 256
unnotched 1/8 in (3.2 mm) section	8.2 ft-lbs/in	438 J/m	D 4812
Tensile Strength	16500 psi	114 MPa	D 638
Tensile Elongation	4.0 - 6.0 %	4.0 - 6.0 %	D 638
Tensile Modulus	0.57 x 10^6 psi	3930 MPa	D 638
Flexural Strength	28000 psi	193 MPa	D 790
Flexural Modulus	0.70 x 10^6 psi	4826 MPa	D 790
ELECTRICAL			
Volume Resistivity	< 1E0 ohm.cm	< 1E0 ohm.cm	D 257
Surface Resistivity	< 1E6 ohm/sq	< 1E6 ohm/sq	D 257
Surface Resistance	< 1E5 ohm	< 1E5 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			
Deflection Temperature			
@ 264 psi (1820 kPa)	390 °F	199 °C	D 648
Ignition Resistance*			
Flammability**	V-0 @ 1/16 in	V-0 @ 1.5 mm	D 3801
Coefficient of Linear Thermal Expansion			
Flow Direction	23.0 x 10^{-5}/°F	41.4 x 10^{-5}/°C	E 831
Transverse Direction	28.0 x 10^{-5}/°F	50.4 x 10^{-5}/°C	E 831
EMI			
Shielding Effectiveness @ 2 mm thickness	49 dB @ 300 MHz	49 dB @ 300 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	55 dB @ 1500 MHz	55 dB @ 1500 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	63 dB @ 300 MHz	63 dB @ 300 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	79 dB @ 1500 MHz	79 dB @ 1500 MHz	D 4935

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	12000 - 18000 psi	83 - 124 MPa
Melt Temperature	670 - 750 °F	354 - 399 °C
Mold Temperature	275 - 350 °F	135 - 177 °C
Drying	4 hrs @ 300 °F	4 hrs @ 149 °C
Moisture Content	0.04 %	0.04 %
Dew Point	-20 °F	-29 °C

PROCESSING NOTES

Use a reverse barrel profile. Remove hopper magnets. Allow 4 - 5 shots to properly disperse the conductive fibers. The surface finish should have a silver streaking appearance, not clumps.
Desiccant Type Dryer Required.