Product Data Sheet &
General Processing Conditions

EMI 330 E FR
Polycarbonate (PC)
Stainless Steel Fiber
Electrically Conductive
EMI/RFI Shielding
Flame Retardant

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	10 %	10 %	
Specific Gravity	1.40	1.40	D 792
Molding Shrinkage			
1/8 in (3.2 mm) section	0.0040 - 0.0070 in/in	0.40 - 0.70 %	D 955
MECHANICAL			
Impact Strength, Izod			
notched 1/8 in (3.2 mm) section	1.0 ft-lbs/in	53 J/m	D 256
unnotched 1/8 in (3.2 mm) section	14.0 ft-lbs/in	747 J/m	D 4812
Tensile Strength	9600 psi	66 MPa	D 638
Tensile Elongation	4.0 - 6.0 %	4.0 - 6.0 %	D 638
Tensile Modulus	0.45 x 10^6 psi	3103 MPa	D 638
Flexural Strength	16500 psi	114 MPa	D 790
Flexural Modulus	0.45 x 10^6 psi	3103 MPa	D 790
ELECTRICAL			
Volume Resistivity	< 1E1 ohm.cm	< 1E1 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	< 0.50 s	< 0.50 s	FTMS101C 4046.1
THERMAL			
Deflection Temperature			
@ 264 psi (1820 kPa)	269 °F	132 °C	D 648
Ignition Resistance*			
Flammability	V-0 @ 1/16 in	V-0 @ 1.5 mm	UL94
EMI			
Shielding Effectiveness @ 2 mm thickness	37 dB @ 300 MHz	37 dB @ 300 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	37 dB @ 500 MHz	37 dB @ 500 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	38 dB @ 700 MHz	38 dB @ 700 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	40 dB @ 1000 MHz	40 dB @ 1000 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	44 dB @ 1300 MHz	44 dB @ 1300 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	46 dB @ 1500 MHz	46 dB @ 1500 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	46 dB @ 300 MHz	46 dB @ 300 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	45 dB @ 500 MHz	45 dB @ 500 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	48 dB @ 700 MHz	48 dB @ 700 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	53 dB @ 1000 MHz	53 dB @ 1000 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	53 dB @ 1300 MHz	53 dB @ 1300 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	55 dB @ 1500 MHz	55 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.

GENERAL PROCESSING FOR INJECTION MOLDING

	English	SI Metric
Injection Pressure	10000 - 15000 psi	69 - 103 MPa
Melt Temperature	530 - 580 °F	277 - 304 °C
Mold Temperature	160 - 250 °F	71 - 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

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.
Remove hopper magnets.
Desiccant Type Dryer Required.