

InElec® PCABSCF40
Americhem - Polycarbonate + ABS
General Information
Product Description

40% CARBON FIBER REINFORCED, POLYCARBONATE/ABS ALLOY, BLACK COLOR

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Carbon Fiber, 40% Filler by Weight		
Features	• Electrically Conductive • Electromagnetic Shielding (EMI) • ESD Protection	• Filled • Good Dimensional Stability • High Stiffness	• High Strength • Permanent Antistatic • Radio Frequency Shielding (RFI)
Uses	• Automotive Applications • Closures • Connectors • Consumer Applications	• Electrical/Electronic Applications • Engineering Parts • Household Goods • Housings	• Industrial Applications • Industrial Parts • Office Automation Equipment
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.41		ASTM D792
Molding Shrinkage - Flow (0.125 in)	0.20 to 0.40	in/in	
Water Absorption (24 hr)	0.12	%	ASTM D570
Mechanical			
Tensile Modulus	2.10E+6	psi	ASTM D638
Tensile Strength	20000	psi	ASTM D638
Tensile Elongation (Yield)	1.0 to 2.0	%	ASTM D638
Flexural Modulus	2.20E+6	psi	ASTM D790
Flexural Strength	28000	psi	ASTM D790
Impact			
Notched Izod Impact	1.3	ft·lb/in	ASTM D256
Unnotched Izod Impact	5.0 to 7.0	ft·lb/in	ASTM D4812
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed)	285	°F	ASTM D648
Electrical			
Surface Resistivity	1.0E+2 to 1.0E+6	ohms	ASTM D257

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	200	°F
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Processing (Melt) Temp	475 to 510	°F
Mold Temperature	125 to 180	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

