

**InElec® PPACF10GF25HS**

Americhem - Polyphthalamide

## General Information

**Product Description**

10% CARBON FIBER 25% GLASS FIBER REINFORCED HEAT STABILIZED PPA

**General**

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Carbon Fiber, 10% Filler by Weight	• Glass Fiber, 25% Filler by Weight	
Additive	• Heat Stabilizer		
Features	• Filled • Good Dimensional Stability	• Heat Stabilized • High Stiffness	• High Strength • Permanent Antistatic
Uses	• Aerospace Applications • Connectors • Consumer Applications • Electrical/Electronic Applications	• Engineering Parts • Housings • Industrial Applications • Industrial Parts	• Military/Defense Applications • Oil/Gas Applications • Outdoor Applications • Semiconductor Applications
Forms	• Pellets		
Processing Method	• Injection Molding		

 Properties <sup>1</sup>

	Nominal Value	Unit	Test Method
<b>Physical</b>			
Density / Specific Gravity	1.44		ASTM D792
Molding Shrinkage - Flow	5.0E-4 to 2.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.20	%	ASTM D570
<b>Mechanical</b>			
Tensile Strength	35500	psi	ASTM D638
Tensile Elongation (Yield)	1.0 to 3.0	%	ASTM D638
Flexural Modulus	2.40E+6	psi	ASTM D790
Flexural Strength	50000	psi	ASTM D790
<b>Impact</b>			
Notched Izod Impact (0.125 in)	1.1	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	8.0	ft·lb/in	ASTM D4812
<b>Thermal</b>			
Deflection Temperature Under Load (264 psi, Unannealed)	530	°F	ASTM D648
CLTE - Flow	1.2E-5	in/in/°F	ASTM D696
<b>Electrical</b>			
Surface Resistivity	1.0E+2 to 1.0E+6	ohms	
<b>Flammability</b>			
Flame Rating (0.06 in)	HB		UL 94

## Processing Information

	Nominal Value	Unit
<b>Injection</b>		
Drying Temperature	275	°F
Drying Time	4.0	hr
Processing (Melt) Temp	625	°F
Mold Temperature	275	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm
Vent Depth	5.0E-4 to 1.0E-3	in

