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InElec® PEEKCNT5

Product Description 5% CARBON NANO-TUBE FILLED PEEK

Material Status Commercial: Active

Availability Africa & Middle East, Asia Pacific, Europe, Latin America, North America

Filler / Reinforcement Carbon Nano, 5.0% Filler by Weight

Features Electrically Conductive, ESD Protection, Permanent Antistatic

Uses Aerospace Applications, Connectors, Consumer Applications, Electrical/Electronic Applications, Engineering Parts, Industrial Applications, Industrial Parts, Metal Replacement, Military/Defense Applications, Oil/Gas Applications, Outdoor Applications, Semiconductor Applications

Forms Pellets

Processing Method Injection Molding

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.32		ASTM D792

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	650000	psi	ASTM D638
Tensile Strength	15000	psi	ASTM D638
Tensile Elongation (Yield)	5.0 to 6.0	%	ASTM D638
Flexural Modulus	700000	psi	ASTM D790
Flexural Strength	30000	psi	ASTM D790

Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	1.0	ft·lb/in	ASTM D256

Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+4 to 1.0E+6	ohms	ASTM D257

Injection	Nominal Value	Unit
Drying Temperature	300	°F
Drying Time	2.0 to 4.0	hr
Processing (Melt) Temp	660 to 750	°F
Mold Temperature	350 to 400	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm
Vent Depth	1.5E-3 to 3.0E-3	in

Notes

[1] Typical properties: these are not to be construed as specifications.