



CoolPoly® E3605 Thermally Conductive Polyamide 4,6 (PA 4,6)

CoolPoly E series of thermally conductive plastics transfers heat, a characteristic previously unavailable in injection molding grade polymers. CoolPoly is lightweight, netshape moldable and allows design freedom in applications previously restricted to metals. The E series is electrically conductive and provides inherent EMI/RFI shielding characteristics.

Thermal	SI/Metric		Testing Standard
Thermal Conductivity	6 W/mK		ASTM E1461
Thermal Diffusivity	0.029 cm ² /sec		ASTM E1461
Specific Heat	1.5 J/g°C		ASTM E1461
Mechanical	SI/Metric	English	Testing Standard
Tensile Modulus	5530 MPa	802 ksi	ISO 527-1
Tensile Strength	49 MPa	7100 psi	ISO 527-1
Nominal Strain @ Break	1.3 %	1.3 %	ISO 527-1
Flexural Modulus	5870 MPa	851 ksi	ISO 178
Flexural Strength	77 MPa	11165 psi	ISO 178
Impact Strength			
Charpy Unnotched	10 kJ/m ²	4.8 ft-lb/in ²	ISO 179-1
Charpy Notched	1.9 kJ/m ²	0.9 ft-lb/in ²	ISO 179-1
Physical	SI/Metric	English	Testing Standard
Density	1.35 g/cc	0.049 lb/in ³	ISO 1183
Mold Shrinkage			
Flow	0.7 %	0.007 in/in	ASTM D551
Cross-Flow	1 %	0.010 in/in	ASTM D551
Water Absorption	1.3 %	1.3 %	ISO 62

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