

CoolPoly® E3607

Thermally Conductive Polyamide (PA)

Description

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.

Physical Properties	Value	Unit	Test Standard
Density	1560	kg/m ³	ISO 1183
Mold Shrinkage – Parallel	0.45	%	ISO 294-4
Mold Shrinkage – Normal	0.7	%	ISO 294-4
Mechanical Properties	Value	Unit	Test Standard
Tensile Modulus (DAM)	10600	MPa	ISO 527-1
Tensile Strength	50	MPa	ISO 527-1
Strain @ Break	0.6	%	ISO 527-1
Flexural Modulus (DAM)	10000	MPa	ISO 178
Flexural Strength	70	MPa	ISO 178
Thermal Properties	Value	Unit	Test Standard
Thermal Conductivity, In-Plane	20	W/mK	ASTM E1461
Thermal Diffusivity, In-Plane	0.1	cm ² /sec	ASTM E1461
Specific Heat	1.1	J/g°C	ASTM E1461
Flammability	V0 @ 1.0mm		UL 94

