

CoolPoly® E8103

Thermally Conductive Thermoplastic Elastomer (TPE)

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	1130	kg/m ³	ISO 1183
Mold Shrinkage – Parallel	1.5	%	ISO 294-4
Mold Shrinkage – Normal	2.1	%	ISO 294-4
Hardness	38	Shore A	ISO 868
Mechanical Properties	Value	Unit	Test Standard
Tensile Strength	1.28	MPa	ISO 37
Strain @ Break	57	%	ISO 37
Tear Strength – Method B	14	kN/m	ISO 34-1
Thermal Properties	Value	Unit	Test Standard
Thermal Conductivity, In-Plane	5	W/mK	ASTM E1461
Thermal Diffusivity, In-Plane	0.0249	cm ² /sec	ASTM E1461
Specific Heat	1.94	J/g°C	ASTM E1461