Therma-Tech™ X TT9200-8706 EC

Polyphenylene Sulfide

PolyOne Corporation

Message:

Therma-Tech™ Thermal Management Compounds have been engineered to combine the heat transfer and cooling capabilities of metals with the design freedom, weight reduction and cost advantages of thermoplastics. These materials provide the benefits of proprietary conductive additive technologies and the performance of select engineering thermoplastic resins. Therma-Tech compounds have been shown to improve thermal conductivity up to 100-times that of conventional plastics and can be used in a wide range of thermal management applications.

	General Information				
	Features	Electrically Conductive			
Automotive Under the Hood Consumer Applications Electrical/Electronic Applications Housings Industrial Applications ROHS Compliance ROHS Comp		Thermally Conductive			
Automotive Under the Hood Consumer Applications Electrical/Electronic Applications Housings Industrial Applications ROHS Compliance ROHS Comp					
Consumer Applications Electrical/Electronic Applications Housings Industrial Applications Housings	Uses	Automotive Applications			
Electrical/Electronic Applications Housings Industrial Applications ROHS Compliance ROHS Comp		Automotive Under the Hood			
RoHS Compliance RoHS Compliant Appearance Black Forms Pellets Processing Method Injection Molding Physical Nominal Value Unit Test Method Tensile Modulus (3.20 mm) 58.6 MPa ASTM D638 Tensile Elongation 3 (Break, 3.20 mm) 20700 MPa ASTM D790 Elevaral Modulus (3.20 mm) 20700 MPa ASTM D790 Flexural Modulus (3.20 mm) 86.2 MPa ASTM D790 Flexural Strength (3.20 mm) 20700 MPa ASTM D790 Flexural Strength (3.20 mm) 20700 MPa ASTM D790 Flexural Modulus (3.20 mm) 20700 MPa ASTM D790 Flexural Strength (3.20 mm) 27 J/m ASTM D256 Thermal Nominal Value Unit Test Method Thermal Conductivity Test Method Thermal Conductivity W/m/K 3 ASTM D55 Flexural Strength (3.20 mm) 27 W/m/K Electrical Nominal Value Unit Test Method Surface Resistivity 1,06+2 to 9.05+3 ohms ASTM D257		Consumer Applications			
ROHS Compliance RoHS Compliant Appearance Black Forms Pellets Processing Method Injection Molding Physical Nominal Value Unit Test Method Specific Gravity 1.70 g/cm³ ASTM D792 Mechanical Nominal Value Unit Test Method Tensile Modulus¹ (3.20 mm) 22100 MPa ASTM D638 Tensile Strength² (3.20 mm) 58.6 MPa ASTM D638 Flexural Modulus (3.20 mm) 0.50 % ASTM D790 Flexural Strength (3.20 mm) 86.2 MPa ASTM D790 Flexural Strength (3.20 mm) 86.2 MPa ASTM D790 Impact Nominal Value Unit Test Method Notchel Izod Impact (3.20 mm) 27 J/m ASTM D756 Thermal Nominal Value Unit Test Method Thermal Conductivity W/m/K W/m/K 5 14 to 15 W/m/K Electrical Nominal Value Unit Test Me		Electrical/Electronic Applications			
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Notched Izod Impact (3.20 mm) 27 J/m ASTM D256 Thermal Nominal Value Unit Test Method Thermal Conductivity ASTM E1461 4 3.0 to 4.0 W/m/K 5 14 to 15 W/m/K Electrical Nominal Value Unit Test Method Surface Resistivity 1.0E+2 to 9.0E+3 ohms ASTM D257	Flexural Strength (3.20 mm)	86.2	MPa	ASTM D790	
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⁵ 14 to 15 W/m/K Electrical Nominal Value Unit Test Method Surface Resistivity 1.0E+2 to 9.0E+3 ohms ASTM D257	Thermal Conductivity			ASTM E1461	
Electrical Nominal Value Unit Test Method Surface Resistivity 1.0E+2 to 9.0E+3 ohms ASTM D257	4	3.0 to 4.0	W/m/K		
Surface Resistivity 1.0E+2 to 9.0E+3 ohms ASTM D257	5	14 to 15	W/m/K		
·	Electrical	Nominal Value	Unit	Test Method	
Flammability Nominal Value Unit Test Method	Surface Resistivity	1.0E+2 to 9.0E+3	ohms	ASTM D257	
	Flammability	Nominal Value	Unit	Test Method	

Flame Rating (1.60 mm)	V-0		Internal Method
Injection	Nominal Value	Unit	
Drying Temperature	140 to 150	°C	
Drying Time	4.0 to 6.0	hr	
Processing (Melt) Temp	320 to 340	°C	
Mold Temperature	140 to 160	°C	
NOTE			
1.	5.0 mm/min		
2.	5.0 mm/min		
3.	5.0 mm/min		
4.	Through-Plane		
5.	In-Plane		

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