

Toraycon™ 5201-X10

PBT

TECHNICAL DATA

Product Description

High impact

Uses

- Automotive Applications
- Automotive Electronics
- Automotive Exterior Parts
- Connectors
- Connectors
- Electrical/Electronic Applications
- Windows & Doors

Processing Method

- Injection Molding

ISO Designation

- >PBT-I<

Type

- PBT/Unreinforced

ASTM & ISO Properties

Physical	Nominal Value	Unit	Test Method
Density (23°C)	1.29	g/cm³	ISO 1183
Molding Shrinkage ¹			Internal Method
Across Flow : 3.00 mm	2.50	%	
Flow : 3.00 mm	2.00	%	
Water Absorption ² (24 hr, 23°C)	0.080	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (23°C)	2600	MPa	ISO 527-1
Tensile Strength (23°C)	50	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	50	%	ISO 527-2
Flexural Modulus (23°C)	2400	MPa	ISO 178
Flexural Stress (23°C)	80	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	6.2	kJ/m²	ISO 179
Charpy Unnotched Impact Strength (23°C)	> 290.0	kJ/m²	ISO 179
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale, 23°C)	70		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Unannealed	150	°C	ISO 75-2/B
1.8 MPa, Unannealed	55	°C	ISO 75-2/A
Coefficient of Linear Thermal Expansion (-30 to 100°C)	14	cm ³ -5/cm/°C	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	4.0E+14	ohms·m	IEC 60093
Electric Strength	19	kV/mm	IEC 60243-1
Dielectric Constant			IEC 60250
23°C, 50 Hz	3.4		
23°C, 1 MHz	3.5		
Dissipation Factor			IEC 60250
23°C, 50 Hz	0.002		
23°C, 1 MHz	0.020		
Arc Resistance	130	sec	IEC 60950
Comparative Tracking Index (CTI)	PLC 0		UL 746A
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.8 mm)	HB		UL 94



Additional Information	Nominal Value	Unit	Test Method
Bar Flow Length ³ (250°C, 1.00 mm)	87	mm	Internal Method

Notes

¹ 80x80x3mm
² in water
³ 93MPa

Toray Industries, Inc.

