

Technical Data Sheet
PERLEX® R251
 Polycarbonate
 Engineering Plastics



General	
Features	• Medium Flow
Uses	• Electrical Parts

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.20 g/cm ³	1.20 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	11 g/10 min	11 g/10 min	ISO 1133
Molding Shrinkage	0.50 to 0.70 %	0.50 to 0.70 %	

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	341000 psi	2350 MPa	ISO 527-2
Tensile Stress (Yield)	8700 psi	60.0 MPa	ISO 527-2
Tensile Strain (Break)	100 %	100 %	ISO 527-2
Flexural Modulus	334000 psi	2300 MPa	ISO 178
Flexural Stress	13100 psi	90.0 MPa	ISO 178

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (Area) (73°F (23°C))	21.4 ft·lb/in ²	45.0 kJ/m ²	ASTM D256

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Heat Deflection Temperature			
66 psi (0.45 MPa), Unannealed	275 °F	135 °C	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	257 °F	125 °C	ISO 75-2/A
Vicat Softening Temperature	288 °F	142 °C	ISO 306/B50

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Burning Rate			
0.0787 in (2.00 mm)	< 3.9 in/min	< 100 mm/min	ISO 3795
0.0787 in (2.00 mm)	< 3.9 in/min	< 100 mm/min	FMVSS 302
Flame Rating			UL 94
0.031 in (0.8 mm)	HB	HB	
0.06 in (1.5 mm)	HB	HB	
0.12 in (3.0 mm)	HB	HB	
Glow Wire Ignition Temperature			IEC 60695-2-13
0.04 in (1.0 mm)	1560 °F	850 °C	
0.08 in (2.0 mm)	1560 °F	850 °C	
0.12 in (3.0 mm)	1560 °F	850 °C	

Notes

These are typical property values not to be construed as specification limits.