

XANTAR™ LDS 3710

Mitsubishi Engineering-Plastics Corp - Polycarbonate

General Information

Product Description

LDS (Laser Direct Structuring), Black color only

General

Features	• Laser Markable
Uses	• Cell Phones • Laser Direct Structuring
Appearance	• Black
Processing Method	• 3D Printing, Laser Sintering/Melting

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.19	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (260°C/5.0 kg)	15	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (260°C/5.0 kg)	14	cm ³ /10min	ISO 1133
Molding Shrinkage			Internal Method
Across Flow	0.50 to 0.70	%	
Flow	0.50 to 0.70	%	
Water Absorption (Saturation, 23°C)	0.60	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2200	MPa	ISO 527-1/1
Tensile Stress (Yield)	50.0	MPa	ISO 527-2/50
Tensile Strain			ISO 527-2/50
Yield	4.0	%	
Break	> 50	%	
Flexural Modulus ²	2250	MPa	ISO 178
Flexural Stress ²	80.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179
-30°C	60	kJ/m ²	
23°C	70	kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179
-30°C	No Break		
23°C	No Break		
Notched Izod Impact Strength			ISO 180/4A
-20°C	40	kJ/m ²	
23°C	60	kJ/m ²	
Multi-Axial Instrumented Impact Energy (23°C)	35.0	J	ISO 6603-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ISO 75-2/A
1.8 MPa, Unannealed	102	°C	
Vicat Softening Temperature	122	°C	ISO 306



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Thermal	Nominal Value	Unit	Test Method
CLTE			ISO 11359-2
Flow	7.0E-5	cm/cm/°C	
Transverse	7.0E-5	cm/cm/°C	
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+15	ohms	IEC 60093
Volume Resistivity	> 1.0E+15	ohms·cm	IEC 60093
Dielectric Constant (1 MHz)	2.80		IEC 60250
Dissipation Factor (1 MHz)	5.0E-3		IEC 60250
Flammability	Nominal Value	Unit	Test Method
Flame Rating (1.6 mm)	HB		UL 94

Processing Information			
Injection	Nominal Value	Unit	
Drying Temperature - Hot Air Dryer	100 to 110	°C	
Drying Time - Hot Air Dryer	4.0 to 6.0	hr	
Rear Temperature	250 to 270	°C	
Middle Temperature	250 to 270	°C	
Front Temperature	250 to 270	°C	
Nozzle Temperature	250 to 270	°C	
Mold Temperature	40 to 80	°C	

