

LAPEROS® S150

Polyplastics - Liquid Crystal Polymer

General Information

Product Description

High Heat Resistance, High-temperature Stiffness
High Stiffness

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Filler / Reinforcement	• Glass Fiber, 50% Filler by Weight		
Features	• High Heat Resistance	• High Stiffness	
UL File Number	• E106764		
Part Marking Code (ISO 11469)	• >LCP-GF50<		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.81	g/cm ³	ISO 1183
Molding Shrinkage ²			Internal Method
Across Flow : 0.0394 in	0.52	%	
Flow : 0.0394 in	0.17	%	
Water Absorption (24 hr, 73°F, 0.0394 in)	0.040	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	21800	psi	ASTM D638
Tensile Elongation (Break)	1.3	%	ASTM D638
Flexural Modulus	2.90E+6	psi	ISO 178
Flexural Stress	30500	psi	ISO 178
Flexural Strain	1.3	%	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	4.3	ft·lb/in ²	ISO 179/1eA
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale)	85		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	626	°F	ISO 75-2/A
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	3.0E+16	ohms·cm	IEC 60093
Electric Strength			IEC 60243-1
0.0394 in	810	V/mil	
0.118 in	510	V/mil	
Relative Permittivity			IEC 60250
1 kHz	4.70		
1 MHz	4.60		
Dissipation Factor			IEC 60250
1 kHz	0.010		
1 MHz	0.010		
Arc Resistance	172	sec	ASTM D495
Comparative Tracking Index	125	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating	V-0		UL 94

