

LAPEROS® E481i

Polyplastics - Liquid Crystal Polymer

General Information

Product Description

Standard, for SMT

Low Warpage, Low Anisotropy

General

Filler / Reinforcement	• Glass Fiber\Mineral, 45% Filler by Weight
Features	• Low Anisotropy • Low Warpage
UL File Number	• E106764
Part Marking Code (ISO 11469)	• >LCP-(MD+GF)45<

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.77	g/cm ³	ISO 1183
Molding Shrinkage ²			Internal Method
Across Flow : 0.0394 in	0.28	%	
Flow : 0.0394 in	0.060	%	
Water Absorption (24 hr, 73°F, 0.0394 in)	0.020	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	16700	psi	ASTM D638
Tensile Elongation (Break)	1.6	%	ASTM D638
Flexural Modulus	1.89E+6	psi	ISO 178
Flexural Stress	23200	psi	ISO 178
Flexural Strain	1.7	%	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	3.3	ft-lb/in ²	ISO 179/1eA
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale)	60		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 264 psi, Unannealed	500	°F	ISO 75-2/A
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	2.0E+16	ohms·cm	IEC 60093
Electric Strength			IEC 60243-1
0.0394 in	1200	V/mil	
0.118 in	640	V/mil	
Relative Permittivity			IEC 60250
1 kHz	4.80		
1 MHz	4.10		
Dissipation Factor			IEC 60250
1 kHz	0.020		
1 MHz	0.020		
Arc Resistance	182	sec	ASTM D495

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Electrical	Nominal Value	Unit	Test Method
Comparative Tracking Index	200	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating	V-0		UL 94
Additional Information	Nominal Value	Unit	
Color Number	VF2201/BK210P		

Notes

¹ Typical properties: these are not to be construed as specifications.

² 80x80x1 mm, 60 MPa Injection Pressure