

LAPEROS® E463i

Polyplastics - Liquid Crystal Polymer

General Information

Product Description

Standard, for SMT

Low Warpage, Low Anisotropy

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber\Mineral, 40% Filler by Weight		
Features	• Low Anisotropy	• Low Warpage	
UL File Number	• E106764		
Part Marking Code (ISO 11469)	• >LCP-(MD+GF)40<		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.72	g/cm ³	ISO 1183
Molding Shrinkage ²			Internal Method
Across Flow : 0.0394 in	0.50	%	
Flow : 0.0394 in	0.090	%	
Water Absorption (24 hr, 73°F, 0.0394 in)	0.020	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	16000	psi	ASTM D638
Tensile Elongation (Break)	3.0	%	ASTM D638
Flexural Modulus	1.54E+6	psi	ISO 178
Flexural Stress	18900	psi	ISO 178
Flexural Strain	3.1	%	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	2.4	ft·lb/in ²	ISO 179/1eA
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale)	45		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	518	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	455	°F	ISO 75-2/A
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+16	ohms·cm	IEC 60093
Electric Strength			IEC 60243-1
0.0394 in	1100	V/mil	
0.118 in	560	V/mil	
Relative Permittivity			IEC 60250
1 kHz	4.50		
1 MHz	3.90		
Dissipation Factor			IEC 60250
1 kHz	0.020		
1 MHz	0.030		
Arc Resistance	182	sec	ASTM D495
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	Test Method
Notes		
¹ Typical properties: these are not to be construed as specifications.		
² 80x80x1 mm, 60 MPa Injection Pressure		

