

**LAPEROS® E471i**

Polyplastics - Liquid Crystal Polymer

## General Information

**Product Description**

Standard, for SMT

Low Warpage

**General**

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Filler / Reinforcement	• Glass Fiber/Mineral, 35% Filler by Weight
Features	• Low Warpage
UL File Number	• E106764
Part Marking Code (ISO 11469)	• >LCP-(GF+MD)35<

 Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density	1.67	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage <sup>2</sup>			Internal Method
Across Flow : 0.0394 in	0.43	%	
Flow : 0.0394 in	0.060	%	
Water Absorption (24 hr, 73°F, 0.0394 in)	0.030	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	20300	psi	ASTM D638
Tensile Elongation (Break)	2.3	%	ASTM D638
Flexural Modulus	1.96E+6	psi	ISO 178
Flexural Stress	28300	psi	ISO 178
Flexural Strain	2.5	%	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	9.5	ft·lb/in <sup>2</sup>	ISO 179/1eA
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale)	65		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	545	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	509	°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	4.30		
1 MHz	3.80		
Dissipation Factor			IEC 60250
1 kHz	0.020		
1 MHz	0.030		
Arc Resistance	176	sec	ASTM D495
Comparative Tracking Index	150	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method



Flame Rating	V-0	UL 94	
<b>Additional Information</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Color Number	VF2201/BK210P		

#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 80x80x1 mm, 60 MPa Injection Pressure

