

LAPEROS® E473i

Polyplastics - Liquid Crystal Polymer

General Information

Product Description

Standard, for SMT
Low Warpage, High Flow

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Filler / Reinforcement	• Glass Fiber\Mineral, 30% Filler by Weight
Features	• High Flow • Low Warpage
Automotive Specifications	• HYUNDAI MS941-03 Type P-3 FRV0
UL File Number	• E106764
Part Marking Code (ISO 11469)	• >LCP-(MD+GF)30<

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.63	g/cm ³	ISO 1183
Molding Shrinkage ²			Internal Method
Across Flow : 0.0394 in	0.39	%	
Flow : 0.0394 in	0.030	%	
Water Absorption (24 hr, 73°F, 0.0394 in)	0.020	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	18100	psi	ASTM D638
Tensile Elongation (Break)	2.8	%	ASTM D638
Flexural Modulus	1.60E+6	psi	ISO 178
Flexural Stress	23200	psi	ISO 178
Flexural Strain	2.8	%	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	9.5	ft-lb/in ²	ISO 179/1eA
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale)	55		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	527	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	482	°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	1300	V/mil	
0.118 in	660	V/mil	
Relative Permittivity			IEC 60250
1 kHz	4.20		
1 MHz	3.70		
Dissipation Factor			IEC 60250
1 kHz	0.020		
1 MHz	0.030		
Arc Resistance	151	sec	ASTM D495
Comparative Tracking Index	150	V	IEC 60112



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

Notes

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

² 80x80x1 mm, 60 MPa Injection Pressure

