

## LAPEROS® E130G

Polyplastics - Liquid Crystal Polymer

### General Information

#### Product Description

Standard, for SMT

GF Reinforced, High Flow

#### General

|                               |                                                                                   |
|-------------------------------|-----------------------------------------------------------------------------------|
| Material Status               | • Commercial: Active                                                              |
| Availability                  | • Africa & Middle East • Europe • North America<br>• Asia Pacific • Latin America |
| Filler / Reinforcement        | • Glass Fiber, 30% Filler by Weight                                               |
| Features                      | • High Flow                                                                       |
| UL File Number                | • E106764                                                                         |
| Part Marking Code (ISO 11469) | • >LCP-GF30<                                                                      |

### Properties <sup>1</sup>

| Physical                                                | Nominal Value | Unit                  | Test Method     |
|---------------------------------------------------------|---------------|-----------------------|-----------------|
| Density                                                 | 1.61          | g/cm <sup>3</sup>     | ISO 1183        |
| Molding Shrinkage <sup>2</sup>                          |               |                       | Internal Method |
| Across Flow : 0.0394 in                                 | 0.66          | %                     |                 |
| Flow : 0.0394 in                                        | 0.060         | %                     |                 |
| Water Absorption (24 hr, 73°F, 0.0394 in)               | 0.040         | %                     | ISO 62          |
| Mechanical                                              | Nominal Value | Unit                  | Test Method     |
| Tensile Strength                                        | 24700         | psi                   | ASTM D638       |
| Tensile Elongation (Break)                              | 3.5           | %                     | ASTM D638       |
| Flexural Modulus                                        | 1.74E+6       | psi                   | ISO 178         |
| Flexural Stress                                         | 24700         | psi                   | ISO 178         |
| Flexural Strain                                         | 4.2           | %                     | ISO 178         |
| Impact                                                  | Nominal Value | Unit                  | Test Method     |
| Charpy Notched Impact Strength (73°F)                   | 17            | 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)  | 518           | °F                    | ISO 75-2/B      |
| Deflection Temperature Under Load (264 psi, Unannealed) | 473           | °F                    | ISO 75-2/A      |
| Electrical                                              | Nominal Value | Unit                  | Test Method     |
| Volume Resistivity                                      | 6.0E+15       | ohms·cm               | IEC 60093       |
| Electric Strength                                       |               |                       | IEC 60243-1     |
| 0.0394 in                                               | 1100          | V/mil                 |                 |
| 0.118 in                                                | 580           | 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                                          | 144           | sec                   | ASTM D495       |
| Comparative Tracking Index                              | 125           | 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                                |               |       |             |

