

ZENITE® 6130L

Liquid Crystal Polymer

Zenite® 6130L is a lubricated 30% glass reinforced LCP resin. It is well suited for use in automotive, electrical/electronic, telecommunications, and aerospace industries.

Product information

Resin Identification	LCP-GF30	ISO 1043
Part Marking Code	>LCP-GF30<	ISO 11469

Typical mechanical properties

Tensile modulus	13000 MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	130 MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	1.8 %	ISO 527-1/-2
Flexural modulus	12000 MPa	ISO 178
Charpy impact strength, 23°C	35 kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23°C	25 kJ/m ²	ISO 179/1eA
Poisson's ratio	0.33 ^[C]	

[C]: Calculated

Thermal properties

Melting temperature, 10°C/min	335 °C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	265 °C	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	3 E-6/K	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), normal	70 E-6/K	ISO 11359-1/-2

Flammability

Burning Behav. at 1.5mm nom. thickn.	V-0 class	IEC 60695-11-10
Thickness tested	1.5 mm	IEC 60695-11-10
Burning Behav. at thickness h	V-0 class	IEC 60695-11-10
Thickness tested	0.38 mm	IEC 60695-11-10
UL recognition	yes	UL 94

Electrical properties

Relative permittivity, 1MHz	4	IEC 62631-2-1
Relative permittivity, 1GHz	4.2	IEC 61189-2-721
Dissipation factor, 1MHz	310 E-4	IEC 62631-2-1
Volume resistivity	1E14 Ohm.m	IEC 62631-3-1
Surface resistivity	1E16 Ohm	IEC 62631-3-2
Electric strength	36 kV/mm	IEC 60243-1
Comparative tracking index	175	IEC 60112
Dissipation factor, printed circuits and boards, 2.5 GHz	50 E-4	IEC 61189-2-721

Physical/Other properties

Density	1620 kg/m ³	ISO 1183
Bulk density	750 kg/m ³	ISO 60

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Injection

Drying Recommended	yes
Drying Temperature	150 °C
Drying Time, Dehumidified Dryer	4 - 6 h
Processing Moisture Content	≤0.01 %
Melt Temperature Optimum	355 °C
Min. melt temperature	350 °C
Max. melt temperature	360 °C
Screw tangential speed	0.2 - 0.3 m/s
Mold Temperature Optimum	100 °C
Min. mould temperature	80 °C
Max. mould temperature	120 °C
Back pressure	3 MPa
Ejection temperature	290 °C

Characteristics

Processing

Injection Moulding

Special characteristics

Flame retardant, Heat stabilised or stable to heat, High Flow, Lead-free soldering resistant

Automotive

OEM

General Motors

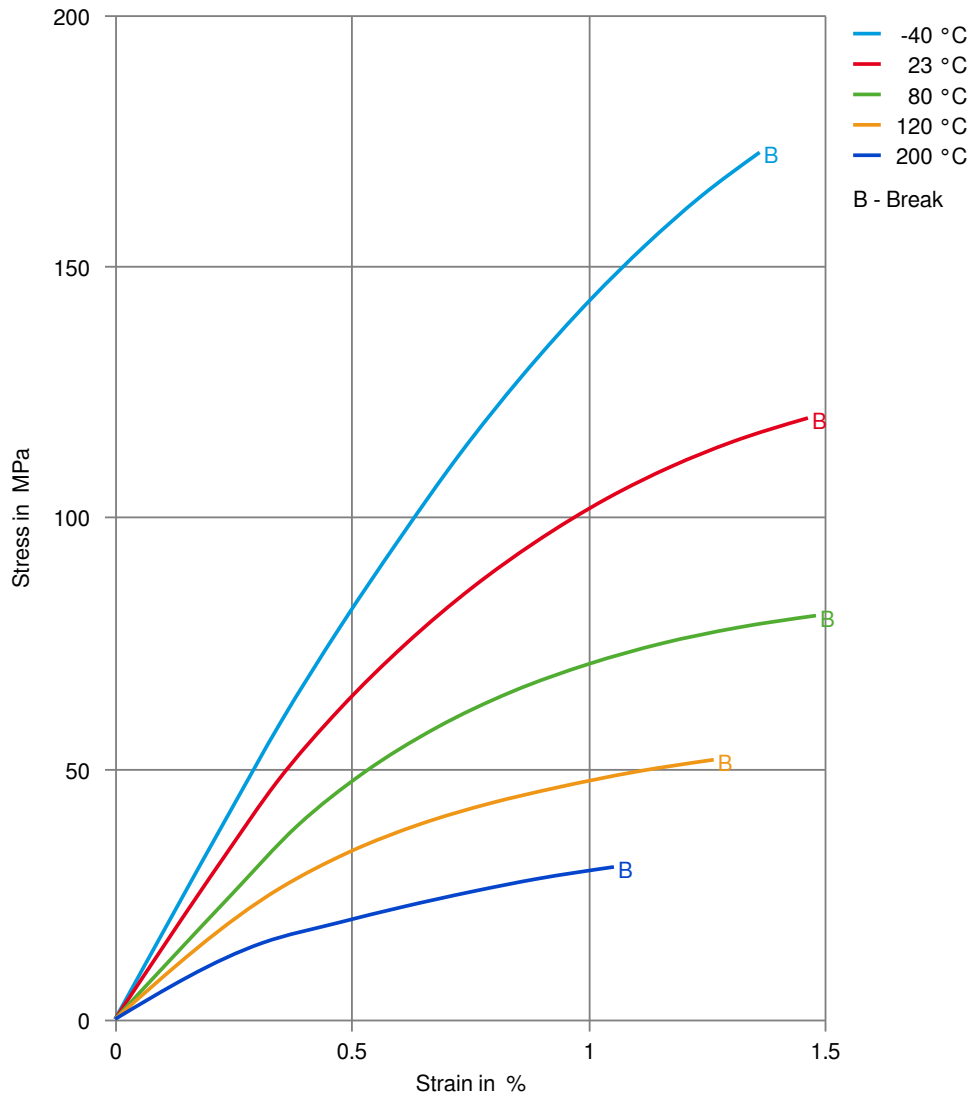
ADDITIONAL INFORMATION

Special Parts Approval, See Your CE Account Representative for Further Details.

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Stress-strain



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Secant modulus-strain

