

Laminate

CDM - DURAPOL

- Excellent performances at temperatures higher than 260°C.
- Dissipative material. Surface resistivity 10E5 to 10E9 Ohm/Square.
- Low deformation.
- Excellent dimensional stability.
- Very good chemical resistance.

General description

CDM- DURAPOL is a composite material made of glass mat, combined with a high mechanical resistance resin system.

Static and its companion ESD (electrostatic discharge) damage electronic components and circuits every day. To use CDM ESD will allow charges to move slowly out of the circuit and will ensure the quality of your production. CDM ESD product have guaranteed dissipative characteristics.

The CDM range of products exhibits higher mechanical and resistance properties as standard composite materials.

The random glass mat substrate present in the CDM- DURAPOL minimizes delaminations problems during machining or pallet use.

The relative low thermal conductivity in the CDM materials allows a rapid pallet turnaround eliminating most of the time both the necessity to provide a cooling station and the process heat sink effect experienced in the metallic pallets.

CDM materials can substitute metallic solder frames (or other materials) with great advantages.

Flux resistance is depending on composition and pH level. CDM - DURAPOL has been developed to have a better withstand towards chemicals. To preserve the stability of CDM - DURAPOL material, a regular cleaning can still be made.

Due to the high fiberglass content, machining is recommended with carbide or diamond toolings. Precise machining with very accurate tolerances can be achieved by experts in the conception and machining of pallets.

Application

Full process solder wave, SMT and selective soldering process

Components insertion

Silk screen printing of solder paste in SMT

SMT placement

Reflow soldering

Components protection

Testing of PCBs

Cleaning of PCB boards

Availability

Standard sheet size : 2350 +/-10mm x 1335 +/-10mm or 2000 X 1250 mm

Standard thicknesses available on stock:
3mm, 4mm, 5mm, 6mm, 8mm, 10mm, 12mm

Color : black

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CM - Composite Materials

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		Value	Test norm
Physical properties			
Density	g/cm ³	1.9 ±0.1	ISO 1183
Water absorption 24h 23°C	%	0.15	ISO 62
Linear coefficient of thermal expansion, parallel	1/K	10.10E-6	VSM 77110
Mechanical properties			
Flexural strength at 23°C, flatwise	MPa	350	ISO 178
Modulus of elasticity in flexure at 23°C, flatwise	MPa	18000	ISO 178
Flexural strength at 200°C, flatwise	MPa	80	ISO 178
Modulus of elasticity in flexure at 200°C, flatwise	MPa	6000	ISO 178
Thermal properties			
Thermal conductivity	W/m.K	0.3	DIN 52612
Electrical properties			
Surface resistivity	Ω	10E5 to 10E9	IEC 93