sheets

CDM ESD 68940

- Good performances with lead free soldering process.
- Increased temperature resistance : good performances at temperatures higher than 300°C.
- Excellent flux resistance.
- Dissipative material. Surface resistivity 10E5 to 10E9 Ohm/Square.
- Optical sensitiveness : grey color enables an easy and improved detection by infra-red cells.
- Low deformation.
- Excellent dimensional stability.
- Improved machinability.

		Value	Test norm
Mechanical properties			
Modulus of elasticity in flexure at 23°C, flatwise	MPa	18000	ISO 178
Flexural strength at 23°C, flatwise	MPa	350	ISO 178
Modulus of elasticity in flexure at 150°C, flatwise	MPa	12000	ISO 178
Flexural strength at 150°C, flatwise	MPa	200	ISO 178
Electrical properties			
Surface resistivity	Ω	10E5 to 10E9	IEC 60093
Thermal properties			
Thermal conductivity	W/m.K	0.3	DIN 52612
Physical properties			
Linear coefficient of thermal expansion, parallel	K^{-1}	10.10^{-6}	VSM 77110
Density	g/cm³	1.9 ±0.1	ISO 1183 (method A)
Water absorption 24h 23°C	%	<0.10	ISO 62 (method 1)

General description

The CDM range of products exhibits higher mechanical and resistance properties as standard composite materials.
The random glass mat substrate present in the CDM ESD 68940 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. Highly acid as well as basic fluxes often require a regular cleaning of remaining powders in order to preserve the stability of CDM material.
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

Can be used in lead free process
Full process solder wave, SMT and selective soldering process
Components insertion
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
Surface grinded (both sides)
Standard thicknesses available :
3mm, 4mm, 5mm, 6mm, 8mm, 10mm, 12mm

Description

CDM ESD 68940 is a composite material made of glass mat, combined with a high mechanical resistance resin system.
Color : Grey

Von Roll Isola France SA
F - 90100 Delle
www.vonroll.com

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