

Laminates

CDM ESD 68620 OS (Preliminary datasheet)

- ▶ Dissipative and optically sensitive material.
- ▶ Good performances with high economical advantages.
- ▶ Low deformation.
- ▶ Good mechanical characteristics and dimensional stability.
- ▶ Good machineability.

General description

This competitive material presents very satisfactory technical values with high economical advantages. CDM ESD 68620 OS is a composite material made of glass mat, combined with a high mechanical resistance resin system with guaranteed dissipative characteristics.

CDM range of products exhibits higher mechanical and resistance properties as standard composite materials. The random glass mat substrate present in the CDM ESD 68620 OS 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 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 materials. CDM ESD 68620 OS presents good resistance to chemical attacks.

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.

RoHS Directive

Hazardous products listed in the EU-directive 2011/65/UE (ROHS-directive), annex II, are not used as ingredients in this material.

	Value	Test norm
Physical properties		
Density	g/cm ³	1.8 ±0.1 ISO 1183
Water absorption (24h 23°C)	%	<0.10 ISO 62
Mechanical properties		
Flexural strength at 23°C, flatwise	MPa	300 ISO 178
Flexural strength at 155°C, flatwise	MPa	150 ISO 178
Flexural strength at 200°C, flatwise	MPa	80 ISO 178
Modulus of elasticity in flexure at 150°C, flatwise	MPa	6000 ISO 178
Modulus of elasticity in flexure at 23°C, flatwise	MPa	13000 ISO 178
Modulus of elasticity in flexure at 200°C, flatwise	MPa	5000 ISO 178
Electrical properties		
Surface resistivity	Ohm/squar e	10E5 to 10E9 IEC 60093

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

Availability

Standard sheet size : 2350 ±10mm x 1335 ±10mm
 Standard thicknesses available:5mm, 6mm, 8mm, 10mm.
 Surface quality : sanded on both sides. It is tolerated to have light zig zag appearance on surface.

Tolerance on nominal thickness : from 5mm to 10mm -> ±0,10mm
 Flatness tolerance (panel size 300x300mm) : 0,2mm
 Color : green-blue

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